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WHY WE ARE HERE

No, its not Nostradamus!

The person shown on the cover depicts a pioneer of science. The person - a man or, rarely, a woman - could be any of dozens of the brilliant people who proposed or discovered some fundamental truth in the way the physical world works. In as much as their task was heroically difficult enough, they had to fight religious and political ignorance, lack of comprehensive scientific knowledge and a limited understanding of the world around them.

They had to invent some things before they could start: The scientific method, Calculus, and almost everything else.

On the page 49 we have made a list of notable scientific achievers and the applied scientists who followed — engineers — who turned those concepts into practical applications. (No correspondence will be accepted if we have made a glaring omission!)

In our fancy we have laid a copy of the 2012 catalogue open on the ancient desk of, say, Nicolaus Copernicus. He is transcribing an order on to a vellum sheet with a quill pen. (The Internet must of been down...)

What we owe these people is, indeed beyond belief. The modern world of today would simply not exist and neither, of course, would Jaycar. So we all owe these people, big time. Indeed, that's why we are here, and to repeat, they made the technical world we live in today.

Amen!



Back to the Future.

This year's catalogue is 516 pages, even bigger more or less than the gorilla 30 year anniversary edition of 2011. As usual, we have about a zillion (over 625 actually) new products which we are genuinely excited about. And as usual our new products stand on the shoulders of our venerable core range.

Of particular note is the expansion of our "Hardcore" range of semiconductors. We have been a bit slack in the last few years and have not kept up with developments in latest semiconductor technology. We have decided to stock wire-leaded versions of the new semis if possible, but some items are just not made this way anymore. Sorry!

In addition to this we have a very exciting new product lineup. This includes a fantastic range of new LED Laser Party Lighting, 2 x 18WRMS Portable Amplifier, Compact Practice Amplifier with 32 drum patterns, HDMI 5.8GHz AV Sender, Digital Wireless Video Doorphone, Solar Wireless Announcers with long (100m) transmission, a host of chargers, docks & converters for iPods®, iPhone® and iPads®, a 2.4GHz DIGITAL CCTV AV Sender, a couple of new Time Lapse Cameras, new 16 Channel Pro Surveillance DVRs, new Professional CCTV Cameras, Reversing Camera Kits with two cameras, HD Car DVR Blackbox, Torches, Worklights, HD 12VDC Set Top Box. In our Power section new Solar Panels, MPPT Solar & Controllers, new Vertical Powerboard, DC Power Meters. new LED replacement globes, new handheld Scope and a Function Generator in the Test section. We've also increased the Arduino range with over 30 new products.

There's more - look out for the icon throughout this catalogue.

What another year! Having said that, we have had nothing like the physical devastation in both Australia & New Zealand last year but the rain is still coming down all over the Eastern seaboard of Oz. There are still worrying aftershocks in Christchurch which is a misery for the people of that city.

An earthquake of another kind has happened. That, of course, was the announcement by Woolworths to sell the Dick Smith Electronics Company.

This saddens me considerably as I was once an employee of DSE. I learnt an awful lot working there and applied that knowledge in managing the operation of Jaycar.

Indeed we have stuck tenaciously to the standards, ideals and especially the enthusiasm that oozed out of that organisation in the early years of DSE.

At the time of printing this catalogue, the fate of DSE is unknown.

You are in good hands, however!

We have opened new stores at Castle Hill in NSW, Joondalup & Mandurah in WA and also in Victoria at Kew East & Ferntree Gully.

For those of you who choose to order goods online we look forward to continue to serve. The online business has grown enormously. Despite this, we are still committed to bricks-and-mortar stores and we will continue to open new stores throughout 2012.

In closing I would just like to remind you again about the debt we owe to the pioneers of science, technology and rational thinking. Please take some time to ponder this.

We all look forward to being of service to you and we have been reminded through the DSE travails that we must keep up our standards if we are allowed to retain your business. Please tell us if we are slipping!

Best wishes for 2012

Gary Johnston.

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At Jaycar we wish your shopping experience to be as convenient and effortless as possible. We guarantee excellent customer service, whichever method you choose.



STORE LOCATOR APP

iPhone® APP Store Locator Available

For information on the iPhone® App please visit the website www.jaycar.com.au/stores

Locate your nearest Jaycar store on your iPhone®

How To Order

5 SIMPLE OPTIONS

1. VISIT YOUR LOCAL JAYCAR STORE With over 78 stores in Australia and New Zealand our network of retail stores continues to grow. Come and visit us at one of these locations see our website or the back cover for full address, phone and trading hours details. Our friendly, experienced staff look forward to showing you our extensive range of products.

2. CALL OUR TOLL FREE HOTLINE 1800 022 888

Our experienced Techstore staff are waiting to take your order. Techstore operates Monday to Friday 8.30am to 5.30pm Saturday 8.30am to 5.00pm (AEST)

3. ORDER ONLINE www.jaycar.com.au

Place orders from the convenience of your home on our secure website 24 hours a day, 7 days a week

4. POST YOUR ORDER Send through the post, enclose your completed order form (on page 495) and send to:

Jaycar Electronics PO Box 107 Rydalmere NSW 2116 Australia

5. FAX YOUR ORDER Simply complete the order form (on page 495) and fax it any time to (02) 8832 3318

JAYCAR TECHSTORE

In a case where you are unable to get to your local Jaycar store, we provide you with the Jaycar Techstore.

With all the fundamental requirements of a user friendly internet site, the Jaycar Techstore is your 'Virtual' access point to over 7,000 products, data sheets and information for your perusal.

Have the added advantage of Techstore only specials & bargains, ordering or checking stock levels in our distribution warehouse plus much more.

Fax or Email your order to us at any time or alternatively you may speak to one of our professional shop trained staff members who will be readily available to assist you.

Jaycar Techstore Your Virtual Access Point

Free Call order Line: 1800 022 888 Monday to Friday 8.30am to 5.30pm Saturday 8.30am to 5.00pm (AEST) Email: techstore@jaycar.com.au



JAYCAR WEBSITE

WWW.JAYCAR.COM.AU

Everything you could need in one convenient location our website gives you admission to all things Jaycar or Jaycar related.

Examine product information and datasheets, overlook monthly advertising and promotions or jump onto our moderated forum and discuss electronics.

Search, browse & buy anytime, anywhere.



JAYCAR WEBSITE SPECIAL FEATURES

- Entire Jaycar 2012 Catalogue online
- · Secure online ordering with express ordering facility
- · Search by category, keyword or catalogue number
- Advance search by price range, product category, products on sale, new products and limited availability
- Access to trade pricing*
- Download software updates where available
- View product datasheets, application notes on technical and installation questions
- · View monthly promotional material
- · View videos of selected products
- Find your local store and contact details (includes maps)
- * In order to purchase at trade prices you must qualify as a bona-fide trade customer. For details see our website.

JAYCAR WEBSITE - ICONS FOR VIDEO & MORE INFORMATION FEATURED ON OUR WEBSITE

VIDEO TUTORIALS



We've added this icon in 2012, as we are building our library of videos to show how to build some items like say kits, and to also show product features and how they can be used.



MORE INFORMATION

Look on the website for more information on this product or range

KIT BACK CATALOGUE

We maintain in our central distribution warehouse an extensive range of discontinued Electronic Project Kits.

On our website each of these kits has a full description and, where available, a link to the original article on the Kit.

More details are available on pages 26, 37 & 38 or or visit www.jaycar.com.au/kitbackcatalogue



JAYCAR CATALOGUE ON A FLASH DRIVE

Get the complete Jaycar 2012 Engineering & Scientific Catalogue in PDF format on a 4GB Flash Drive. Available in-store or online.

Cat. XC-5611 \$8.95 See page 285



NEW TRADE CARD - VIP

ATTENTION ALL TRADIES... **OUR WAY OF SAYING THANK YOU!**

If you're a professional engaged in the regular purchase of electronics goods for business purposes, you may qualify* for a Jaycar Electronics Trade Card - VIP.

Our new Trade Card gives you access to special trade prices in all our Jaycar Stores including Techstore. Jaycar provides you with convenient locations, fantastic service and great prices!



HOW DO I GET A NEW TRADE CARD - VIP?

For full details apply online or at your local store. Conditions apply.

To apply visit www.jaycar.com.au/tradecard

*Conditions apply: Trade Cards are not available for transactions outside Australia and New Zealand. They are valid at Jaycar company owned stores ONLY.



REWARDS CARD

OUR WAY OF SAYING THANK YOU!

laucai

At Jaycar we'd like to take this opportunity to say thank you to those of you who buy from us regularly and have supported us over the 30+ years we've been in business. As a way of



saying thank you - everyday - we've put together a loyalty programme, we've called Jaycar Rewards. It's for our regular customers who love DIY everything electronic! The Jaycar Rewards programme will entitle you to accumulate points with every purchase* at any Jaycar Store*. We're going to run special promotional deals just for club members and lots, lots more. Keep an eye out for these promotions in our monthly brochures later this year.

HOW DO YOU GET A REWARD CARD?

The Rewards programme will launch at the start of May but you will be able to apply for the cards from the start of April by visiting www.jaycar.com.au/rewards and filling in the online application form. We will then send you your very own Jaycar Rewards card*. So keep an eve out. Again from all of us at Jaycar, thank you for your continued support and we look forward to being able to provide assistance to you when you next visit your local Jaycar Store.

* Conditions apply, company stores only and only available for transactions in Australia and New Zealand

To apply visit www.jaycar.com.au/rewards

GIFT CARDS*



Can't decide what to buy for that "hard to buy for" person?

Give them a gift card! We've replaced our paper vouchers with new debit card size plastic one. These are available for purchase in-store or online. These are a great gift idea, easy to use and you can now check the balance of the card online.

* Minimum value \$20 and conditions apply. Only available for Australian and New Zealand Customers. Full terms and conditions available - see our website.



ICONS USED THROUGHOUT THE CATALOGUE



Brand new product for the Jaycar 2012 Catalogue.



We constantly negotiate better pricing & pass these savings on to you. This icon identifies these products.



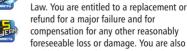






Crazy Clearance Icon End of line items at crazy prices







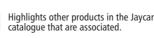
Build it yourself components.

Books located here. Full index



Blue price bar denotes clearance a line.







refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. For details refer to page 496 or online at www.jaycar.com.au/warranty.

Product warranty period is three months

unless stated by the blue warranty icon. Our

goods come with guarantees that cannot be excluded under the Australian Consumer



of books located on page 513.

This year we've been busy adding over 625 new products to the 2012 catalogue.

All new products have a logo next to them so they are easy to find.

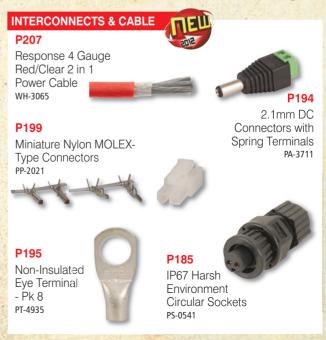
On the following pages we've highlighted just a few of these new products. So grab a cup of tea or coffee and have a browse!

New Products in 2012









New Products in 2012









New Products in 2012



AUTO & OUTDOORS PRODUCTS



P402

2.4GHz DIGITAL Wireless Reversing Camera with 3.5" LCD Monitor OM-3806



P402

Wireless 2.4GHz Reversing Cameras and LCD Monitor Kit - 2 Cameras OM-3797



12VDC HD Digital Set Top Box



P401

Portable Metal Car Safe HB-5455





P382

Rechargeable Automotive Work Light ST-3261



P420

Solid LED Light Bars for 4WD/Marine SL-3912



IT & COMMS PRODUCTS

P295

USB to Apple® Connector/USB Micro B and Mini B Cable WC-7691



P283

Flucard® PRO

Wireless SD

Card - 8GB

XC-5620

2012 P285

> Android Smart TV Media Player XC-4208



P297

Wi-Fi Remote Wireless IP Camera QC-3368



P298

Mini Wireless Keyboard with Trackball XC-4943



SECURITY & SURVEILLANCE PRODUCTS

P473

P403

LCD

QV-3840

HD Car Event

Recorder with

Professional Hybrid Digital Video Recorder (DVR) - 16 Analogue + 16 IP Channels QV-8124



P475

Network Connect Vandal Proof Mini Dome Camera 2MP QC-8626



Wireless DVR Kit with Solar Powered 2.4GHz Digital Wireless Camera QC-3644



2.4GHz CCTV Wireless DIGITAL AV Sender OC-3201

P456

Wireless 7" Colour Video Doorphone with Recording Function QC-3621



P465

Weatherproof Time Labse HD Camera OC-8030



P439

Fluorescent Tube

LIGHTING & HOME AUTOMATION

Ecolume 9W Downlight Kit ZD-0355



P446

Wireless Gateway Home Automation Controller LA-5570



Hardcore

In the past 30+ years we have seen a decline in the nature of being an electronic enthusiast. The advent of the PC created an enthusiast who prefered a keyboard to a soldering iron. Well, that's changing!

We are starting to see a resurgence in people going back to the workbench and reviving skills involving manual dexterity. As usual the movement has begun in the USA.

Right now enthusiasts are building all sorts of things and gatherings called "MAKER FAIRE" are attracting hands on enthusiasts by the thousands. Watch for it here.

As usual, Jaycar has the DIY tools to help you create products from the power of your brain and your hands!



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Mechatronics - Development Kits for Arduino

ARDUINO DEVELOPMENT KITS

Last year we introduced a small range of "Arduino" based products, small but surprisingly powerful PC board computers and accessories. We have made some exciting additions to the

The Arduino system is very popular and easy to use for creating your own projects. Made up of a simple hardware platform and a free code editor with an easy one-click "compile/upload" feature, it is designed to be fast and fun without being an expert programmer.

Free software, hundreds of examples, circuit diagrams, programs, all kinds of projects and tutorials are openly available on the internet to support these interactive boards. Many sensors, modules and displays can be used. You can also use servo motors, DC motors, gearboxes, speakers, LEDs, switches, cases and many other electronic parts in our catalogue to make your project, there is no limit to compatibility with general electronic

This is also the most popular system for advanced users and all kinds of interactive and ambitious projects. It has been used to make robots, home automation, automotive



projects, for sensing and controlling lights, motors, locks and servos, sound and video, interactive objects like animated sculptures, toys and games, radio links and just about anything else you can dream up. It can even be a web server and connect your projects to the Internet. The software is free and cross-platform: Windows, Mac® OS X and

Many off-the-shelf plug in and prototyping "Shields" are available. Shields plug straight into the top of your board to extend its capabilities: motor control, radio link receivers, relay drivers, display and keypad, Ethernet, Wi-Fi, GSM mobile communication and more. Smaller "Modules" incorporating sensors, accelerometers, actuators, sound input and output, smart RGB LEDs and more are available to make it easy to connect interactive parts without fine soldering.

Online resources include the forum, guides and more at www.freetronics.com, the Arduino website with language reference and large worldwide forum at www.arduino.cc, and an excellent range of tutorials at Aussie local John Boxall's www.tronixstuff.com

Of course Google and some of the books that we stock are also an excellent resource. Keep an eye on our website for more Arduino related products throughout the year.

There's no limit to general electronic components in our catalogue that can be used with your projects. LEDs, speakers, servo motors, DC motors, gearboxes, switches, cases, connectors and more are all available to put together whatever you need

HERE ARE 3 SAMPLE PROJECTS FOR YOU TO REVIEW

Visit our website www.jaycar.com.au/arduino for project details

Online Temperature and Humidity

Easily create an Internet-connected temperature / humidity sensor, datalogger, and thermostat by combining an XC-4216 EtherTen and an XC-4246 Temperature / Humidity Sensor Module. You can even power it over the LAN cable using an XC-4254 4-Channel PoE Injector.



Water Flow

You can build many of the projects in the book "Practical Arduino" using parts from Jaycar. The Water Flow Gauge project described in the book can be built using the Eleven XC-4210, the Digital Flowmeter ZD-1200, the ProtoShield Basic XC-4214, and the 2-Line 16-Character LCD Panel QP-5517. Even the case and buttons featured in the book are from Jaycar!



RFID

You can build your own mobile phone accessories using the XC-4222 USBDroid, which connects to Android devices such as phones and tablets. It acts as a gateway to whatever sensors and other devices you want to connect to your phone, such as an RFID module so you can turn your phone into an RFID reader!



BOOKS

Getting Started with Arduino Book - 2nd Edition

The open-source Arduino development platform continues to gain popularity due to the ease of use and low development costs. Now in its second edition this book is aimed at the first-timer and explains what Arduino is, how it works, and what you can do with it. Additional sections include circuits and code to cover the building blocks of development such as digital input and output, analogue sensors, pulse width modulation output, and communications.

• Soft cover 128 pages. 216 x 140mm

Cat Qty 1+ BM-7131

Gettin with Arduino

Practical Arduino

A much larger and detailed book. It takes you beyond the basics quite quickly and shows you how to make up a typical application/design. Examples of typical projects, 14 in all are worked through, ranging from simple toquite complex. This is a necessity as it goes to the heart of Arduino

• Softcover, 422 pages. 235 x 190mm







ARDUINO COMPATIBLE BOARDS

ELEVEN: The standard board, based on the Arduino Uno with some improvements. ETHERTEN: With on-board Ethernet for LAN, web server and internet connections, plus a microSD card slot for extra storage. Can also be powered from the Ethernet cable remotely with a cable setup.

ETHERMEGA: A Mega sized EtherTen for big projects, more I/O pins, more flash memory and RAM, plus a switchmode power supply and all the same embedded Ethernet and features of the EtherTen.

USBDROID: With an on-board USB Host system, this board can interface with Android mobile phones and tablets for control and display, and other USB devices like GPS Receivers, some digital cameras, barcode scanners, keyboards and more.

LEOSTICK: A pocket sized USB board with most of the pins of the Eleven plus an on-board speaker, controllable RGB Colour LED, pin sockets and plug it directly into your USB port!

Eleven (Arduino Uno Compatible)

The "Eleven" is just like an Arduino Uno - but better! It is based on the existing (at the time of print) Arduino Uno but with improvements and updates for ease of use, cost and getting started. An Arduino Uno like the "Eleven" is a microcontroller board based on the ATmega328 (see website for datasheet). It has 14 digital input/output pins (of which 6 can be used as PWM outputs), 6 analogue inputs, a 16MHz crystal oscillator, a USB connection, a power jack, an ICSP header, and a reset button. It contains everything needed to support the microcontroller; simply connect it to a computer with a USB cable or power it with an AC-to-DC adapter or battery to get started.

Also included in the package are a USB cable, and a Getting Started guide sheet. As well as standard Arduino Uno features, the Eleven has some improvements and updates that are listed on our website.

7	Cat.	Qty 1+
	XC-4210	\$39.95

Mechatronics - For Arduino

EtherTen (Arduino Compatible with Onboard Ethernet)

Arduino and Ethernet. Until now the only way to connect an Arduino to the Internet via a LAN was to add an Ethernet Shield. The EtherTen is an Arduino compatible board that can talk to the world. Do Twitter updates automatically, serve web pages, connect to web services, display sensor data online, and control devices using a web browser. The EtherTen uses the same ATmega328P as the Uno and the same Wiznet W5100 chip used by the official Arduino Ethernet Shield, so it's 100% compatible with the Ethernet library and sketches. Any project you would previously have built with an Arduino and an Ethernet shield stacked together, you can now do all in a single, integrated board. Another feature is a MicroSD card slot so you can store web content on the card, or log data to it.

- Gold-plated PCB Top and bottom parts overlay Top-spec ATmega328P MCU

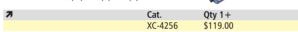
- Mini-USB connector: no more shorts against shields!
 D13 pin isolated with a MOSFET so you can use it as an input
 Power-over-Ethernet support, both cheapie
 DIY or full 802.3af standards-compliant
- Ethernet activity indicators on the PCB and the jack
- 10/100base-T auto-selection
 Fully compatible with standard Ethernet library
- Fixed SPI behaviour on Ethernet chipset Robust power filtering Rounded corners
- Dimensions: 76(W) x 54(D) x 19(H)mm

7	Cat.	Qty 1+	Qty 5+
	XC-4216	\$69.95	\$62.95

EtherMega, Mega Sized Arduino 2560 compatible with Ethernet

The ultimate network-connected Arduino-compatible board: combining an ATmega2560 MCU, onboard Ethernet, a USB-serial converter, a microSD card slot for storing gigabytes of web server content or data, Power-over-Ethernet support, and even an onboard switchmode voltage regulator so it can run on up to 28VDC without overheating! Amazing.

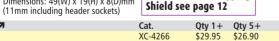
- ATmega2560MCU running at 16MHz
- 10/100base-T Ethernet built in
- Can be used as a web server, remote monitoring and control home automation projects and any projects which benefit from many control pins
- Power-over-Ethernet support with optional module
 54 digital I/O lines
- 16 analog inputs
- · MicroSD memory card slot
- Prototyping area
- Switchmode power supply
 Dimensions: 105(W) x 54(H) x 19(D)mm



LeoStick (Arduino Compatible)

The very popular LeoStick is a tiny Arduino-compatible board that's so small you can plug it straight into your USB port without requiring a cable! Even with its tiny size it has a full range of analogue and digital I/O just like its larger cousins, and also has a user-controllable RGB LED on the board and an onboard Piezo/sound generator so you can make your board light up and play sounds without any extra hardware at all! We don't supply the headers pre-soldered in case you wish to use header pins instead (available separately)

- ATmega32u4 MCU with 2.5k RAM and 32k Flash
- 6 analogue inputs (10-bit ADC) with digital I/O, 14 extra digital I/O pins
- Includes a getting started guide and header sockets for plug-in modules and projects.
- Compatible with the Arduino IDE
- User-controlled RGB LED
- Built in Piezo sound speaker Dimensions: 49(W) x 19(H) x 8(D)mm (11mm including header sockets)



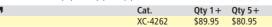
RELATED PRODUCT

For LeoStick Prototyping

Arduino Experimenters Kit

Servo motor, lights, buttons, switches, sound, sensors, breadboard, wires and more are included with a Freetronics Eleven Arduino compatible board in this extensive hobby experimenter, inventor and starter kit. Complete with some great instructions and a supporting web page and software examples, this is everything you need to get started for a fun range of electronics and Arduino related projects

- No soldering required
 Instructions for many educational and fun projects included
- Supplied in a presentation box Dimensions: 340(W) x 165(H) x 36(D)mm



USBDroid with onboard Android/USB Host

Just like an Freetronics Eleven but with a microSD slot and extra USB port designed to connect with Android devices like the HTC Desire and Nexus mobile phones or the Xoom tablet. It is specially designed to be compatible with the Android Open Accessory Development Kit so you can write software to get the phone and USBDroid to talk each other, enabling you to build your own Android peripherals to connect your phone to whatever you like. It even has a built-in charger to recharge the Android device.

- USB (A to Mini B) cable included for PC connection
 USB cable for connection to Android device required
- PCB dimensions: 68 x 53mm

71	Cat.	Qty 1+
7)	Cat.	Qty I +
	XC-4222	\$69.95

SHIELDS

Plug shields on top of your boards directly to extends its capabilities. Displays and keypads, radio link receivers, communications, motor and relay drivers and much more.

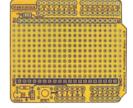
ProtoShield Basic for Arduino

Breadboards are handy for quickly prototyping Arduino projects on the workbench but they are no good for making a more permanent project. The ProtoShield Basic is a low-cost Arduino prototyping shield that enables you to make more durable or permanent projects. It fits directly onto an Arduino compatible board such as the TwentyEleven and has a large general-purpose area in the middle where you can solder on your own parts. They're designed to be so cheap that you can keep a few around your workshop just in case you get the urge to build compthing. The PCR suffice is read leasted for maximum durability, and it has something. The PCB surface is gold-plated for maximum durability and it has connection markings on both the top and the bottom for easy identification.

- Gold plated
- Top and bottom overlay

- Yellow solder mask
 Mounting pads for reset button
 wired through to Arduino reset line
 Mounting pads for power on LED and current-limiting resistor
- Mounting pads for power supply capacitors
 Clearly marked GND and 5V rails
- beside prototyping area

 Dimensions: 59(L) x 53(W)mm



7	Cat.	Qty 1+	Qty 5+
	XC-4214	\$4.45	\$3.95

ProtoShield Short for Arduino

A dedicated short version prototyping shield for the Freetronics EtherTen and EtherMega. This special prototyping shield is designed to fit neatly behind the RJ45 Ethernet jack, allowing you to stack your Ethernet-based projects right on top with standard headers.

- Pads available to fit a reset button
 Gold-plated surface for maximum durability
 Large free-form pad area for your own parts
 Dimensions: 49(L) x 54(W) x 2(D)mm

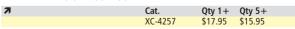


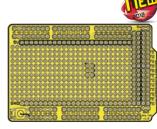
7	Cat.	Qty 1+	
	XC-4248	\$4.95	

Mega Prototyping Shield for Arduino

A super-size prototyping shield to fit the EtherMega (XC-4256) and Arduino compatible "Mega" size boards so you can fit your own parts for projects. Fits on the top of the EtherMega and provides a large matrix of plated-through holes for your own use. Includes header

- Over 300 general-purpose plated holes for your parts
- Handy 5V and GND rails
- All Arduino I/O header pins branched out for your use
- Gold-plated surface
- Reset button • Dimensions: 82(W) x 54(H) x 2(D)mm

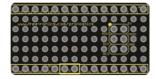




LeoStick Prototyping Shield

Add your own custom parts to the LeoStick to build projects or add more I/O connectors. Fits on the top of the LeoStick and provides you a free matrix of plated-through holes for vour own use

- 64 general-purpose plated holes
- for your parts
 All Arduino I/O headers brought
- up for your use Includes male header pins
- Gold-plated surface
 Dimensions: 36(L) x 19(W) x 2(D)mm



7	Cat.	Qty 1+	Qty 5+
	XC-4268	\$7.95	\$6.95

Terminal Shield for Arduino

Breaks out all the Arduino headers to handy screw terminals, making it easy to connect external wires without using a soldering iron. Ideal for quick experiments or for robust connections! Supplied with all the supporting components already fitted as surface-mount parts so you can start using it right away, as well as stackable headers to allow you to mount another shield on top.



- Large prototyping area with through-plated holes
 Clearly marked GND and 5V rails beside prototyping area
- Blue surface-mount ipower oni LED
- Power supply smoothing capacitors
- Reset button wired through to the Arduino so you can reset it even with the shield mounted over the top.
- 3 general-purpose surface-mount LEDs (red, green, blue) with current limiting resistors pre-fitted
- Printed PCB overlay on both sides
 Dimensions: 79(L) x 61(W) x 26(D)mm

7	Cat.	Qty 1+
	XC-4224	\$16.95

433MHz Receiver Shield for Arduino

Add a receiver module to your Arduino project to receive signals from wireless devices including weather stations, home automation remote controls, power consumption meters, car alarms, and also many DIY projects that transmit on 433MHz. Supplied with RXB6 433MHz receiver module. Described in Practical Arduino Book BM-7132



THE PERSON

- · Fully pre-assembled except for headers
- · Includes stackable headers that you can solder in place
- Red and green debugging LEDs to display signal reception status • Red and green SMD LEDs with
- current limiting resistors
 Reset button wired through to
- Arduino reset pin
- Blue power LED
- Power supply smoothing capacitors
- Huge prototyping area where you can add your own parts
- Clearly marked GND and 5V rails Printed PCB overlay on both sides

- Gold-plated surface for easy soldering
 Dimensions: 60(L) x 54(W) x 9(D)mm

7	Cat.	Qty 1+
	XC-4220	\$29.95

H-Bridge Motor Driver Shield for Arduino

Directly drive DC motors using your Arduino compatible board and this shield, which provides PWM (Pulse-Width Modulation) motor output on 2 H-bridge channels to let your board control the speed, direction and power of two motors independently. Perfect for robotics and motor control projects.

- Drives up to 2A per motor channel
 All outputs are diode and back-EMF protected
- Dimensions: 60(L) x 54(W) x 12(D)mm

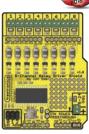


71	Cat.	Qty 1+	Qty 5+
	XC-4264	\$29.95	\$26.90

8 Channel Relay Driver Shield

Drive up to 8 relays from your Arduino using just 2 I/O pins with this shield. It communicates with your board using I2C, so you can even stack several shields together to drive 16, 24, or more outputs! Includes back-EMF protection and works with a wide range of relays. Perfect for home automation projects when combined with relay SY-4052 and DIN-rail relay mounting base SY-4063

- · Plugs straight into your Arduino-compatible board
- Just 2 I/O pins required to control 8 outputs
 Individual LED status display on every output channel
- LED status displays for host power and external power
 Drive relay coils of 5V to 24V
 (with external power supply)
- Suggested relays like SY-4052 are rated at 2 x 5A @ 240VAC
- Dimensions: 52(L) x 66(W) x 12(D)mm



4 Channel Relay Driver Module also available see page 14

7	Cat.	Qty 1+	Qty 5+
	XC-4276	\$34.95	\$31.45

Stackable Header Set for Arduino

The perfect accessory to the ProtoShield Basic, Pro, and vero type boards when connecting to your Arduino compatible project. Stackable headers have female sockets on the top and male pins underneath, allowing you to conveniently stack boards and shields up in your project.

- · Gold flash 0.1" pitch quality stackable headers
- 2 x 8 pin and 2 x 6 pin included to suit the Eleven, EtherTen, USBDroid and ProtoShields

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	HM-3207	\$2.95	\$2.60	\$2.30

DISPLAYS

16 x 2 LCD Shield for Arduino

Add a 16 character by 2 line LCD display to your Arduino project. It plugs straight into the Arduino board or other project shields and features 5 buttons and a controllable blue backlight. The display can be panel mounted if required, and it works perfectly in 4-bit mode with the "LiquidCrystal" library included with the Arduino IDE, allowing you to control the LCD with a total of just 6 digital I/O lines. The buttons provide left, right, up, down, and select while using just one analogue input, which leaves the other analogue inputs free for you to use in your projects.

- 16x2 LCD using HD44780-compatible display module (white characters on blue background)
- 5 buttons on one analogue input (A0).
 LCD backlight with current limiting, brightness
- and on/off controllable by D3, can be moved to D2, D10, A1, A2, A3, A4 or A5 for easy project
- pin compatibility Recessed LCD, panel mount screw holes and button layout suitable for panel or cabinet mounting if desired
- Reset button

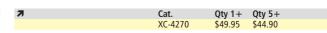
- Power supply smoothing capacitor
 Gold-plated PCB for maximum durability
 Overlay printed on both the top and the bottom
- Pins used by shield clearly marked, LiquidCrystal library setup reference is on the bottom of the PCB for convenience
- Dimensions: 85(L) x 53(W) x 23(D)mm

7	Cat.	Qty 1+
	XC-4218	\$29.95

128x128 Pixel OLED Display Module for Arduino

Light up your display needs with this high resolution, full colour OLED display module! Perfect for graphics, gauges, graphs, even make your own video game or interactive display.

- 16,384 full colour RGB pixels in a 128 x 128 format
 Active display area 28.8 x 26.8 mm,
- (1.5 inch diagonal)
- 4 removable mounting tabs
- Simple interface with Arduino compatible library, graphics and text functions plus examples Dimensions: 44(W) x 36(H) x 5(D)mm







Mechatronics - For Arduino

Large Dot Matrix Display Panel for Arduino

A huge dot matrix LED panel to connect to your Freetronics Eleven, EtherTen and more! This large, bright 512 LED matrix panel has on-board controller circuitry designed to make it easy to use straight from your board. Clocks, status displays, graphics readouts and all kinds of impressive display projects are ready to create with this display's features.



Note: Can for

comparison only

- 32 x 16 high brightness Red LEDs (512 LEDs total) on a 10mm pitch
- 5V operation
 Viewable over 12 metres away
- Tough plastic frame Controller IC is on board, simple clocked data interface
- Arduino compatible library graphics functions and example support Dimensions: 320(W) x 160(H) x
- 14(D)mm (30mm(D) including rear connectors)

7	Cat.	Qty 1+
	XC-4250	\$39.95

MODULES

The many modules available give you easy connections with online guides for interactive sensors, actuators, displays, light and sound

3-Axis Accelerometer Module

This 3-axis accelerometer module can operate in either +/-1.5g or +/-6g ranges, giving your project the ability to tell which way is up. Ideal for robotics projects, tilt sensors, vehicle data loggers, and whatever else you can dream up. Perfectly suited for Arduino projects.

- Independent X, Y, and Z axis outputs
- Can run from either 5V or 3.3V
 Zero-G free-fall detection
- Dimensions: 23(W) x 15(H) x 4(D)mm



Temperature Sensor Module for Arduino

Sprinkle these around your house to collect temperature data using your Arduino. This 1-wire bus temperature sensor module is easy to connect and use. You can even daisy-chain several together on the same wire. 0.5°C accuracy and fast

- -55 to +125°C temperature range
 +/-0.5°C accuracy
 Selectable 9 or 12 bit precision
- · Arduino compatible library and
- examples support

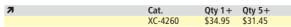
 Unique device ID coded into every sensor
- · Two sets of header connections to allow easy daisy-chaining
 • Dimensions: 23(W) x 16(H) x 6(D)mm

71	Cat.	Qty 1+	
	XC-4230	\$16.95	

IR Temperature Sensor Module for Arduino

Remote temperature sensing for your Arduino! Connect this to your board and point it at a surface or heat source to remotely measure its temperature. This is our special version of the industrial infrared remote thermometer units with an onboard power supply, communication support and a software library and examples supplied.

- 3.3 to 5V operation
- -33 to +220°C measurement range, 1 second response time
- Free software library and examples
- On-board power supply and communications interface
- Dimensions: 38(W) x 14(H) x 12(D)mm



Humidity & Temperature Sensor Module for Arduino

Measure temperature and relative humidity using a simple interface that requires just three wires to the sensor: GND, power, and data. Supported by an Arduino library that makes it very easy to read values into your project, so with a single I/O line from your microcontroller you can read both temperature and humidity.

- -4°C to +125°C temperature range
- -4*C to +125 C temperature range with +/-0.5°C accuracy
 0-100% relative humidity with 2-5% accuracy
 0.5Hz sample rate (one sample every 2 seconds)
- 3 to 5V operation
- Power consumption just 4.3mA during reads, even less when idle
- Blue power LED
- Dimensions: 31(W) x 23(H) x 4(D)mm

7	Cat.	Qty 1+
	XC-4246	\$19.95

Hall Effect Magnetic & Proximity Sensor Module for Arduino

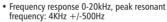
Sense magnetic presence, rotating wheels and magnets, door and arm sensors, and anything else magnetic nearby this sensor

- Green "triggered" LED for easy setup and use
- . Output turns on at 40 Gauss (4mT) and turns off at 30 Gauss (3mT)
- Senses both north pole and south pole magnetic polarity
- 2.5 to 5.5V operation
- Dimensions: 21(W) x 16(H) x 4(D)mm

7	Cat.	Qty 1+
	XC-4242	\$9.95

Sound & Buzzer Module for Arduino

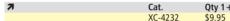
This versatile piezo-element module can be used for either input or output! It can be used as a noise-maker driven by vour microcontroller for audible feedback of events, and it can also be used as a knock-detector input to sense events and react to them. Includes a built-in 1M resistor to allow the piezo element to detect shocks.



Sound pressure level at 10cm: 75dB (min)

1 to 25V rated voltage (3 to 5V typical)
Built-in 1M resistor for knock sensor functionality

Dimensions: 23(W) x 16(H) x 5(D)mm



Microphone Sound Input Module for Arduino

Give your project ears with this sound response and sound pressure level sensing module. An integrated dual signal amplifier converts the sound to separate channels for pulse and frequency measurement, and sound volume level. Designed to connect straight to an Arduino compatible microcontroller, Analog to Digital converter or many other circuits.

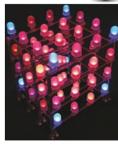
- Omnidirectional microphone
- Frequency response 60Hz to 15kHz
 Sensitivity -40dB typical
 Dimensions: 23(W) x 16(H) x 8(D)mm

7	Cat.	Qty 1+
	XC-4236	\$9.95

RGB LED Cube Kit 4x4x4 for Arduino

This stunning 3D-matrix of 64 RGB LEDs connects directly to your Arduino-compatible board so you can produce mesmerising light shows controlled by software. Use it as a mood light, or create your own "ambient device" that gently notifies you of new email or instant messages!

- 4 x 4 x 4 matrix of individually addressable 8mm RGB LEDs
- · Arduino driver library with example programs
- Includes ZigBee headers so you can add a wireless module
- Requires assembly
 Dimensions: 106(W) x 130(H) x 106(D)mm (assembled)



Cat.	Qty 1+	Qty
XC-4274	\$89.95	\$80.

Full Colour RGB LED Module for Arduino

This is an LED with a brain! Includes a bright RGB LED on the top of the board and a WS2801 constant-current, addressable, multi channel LED driver on the back. This smart module can be daisy-chained, so you can connect a number of these together in a string and drive each of the module colours individually from your microcontroller. The WS2801 includes its own built-in PWM outputs, so once you have set the brightness it will maintain it independently

- 3.3 to 5V operation
- Constant current controller
 Requires just 2 data connections: clock and data
- Input and output headers on opposite sides of the board for easy daisy-chaining
- Dimensions: 18(W) x 18(H) x 5(D)mm

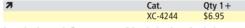
XC-4234

N-MOSFET Driver & Output Module for Arduino

This high-power N-MOSFET module lets you switch high-current loads using a tiny microcontroller. Perfect for controlling that set of traffic lights mounted in your living room! Works brilliantly for automotive projects such as switching high-power 12V lights and high wattage LEDs.

- Maximum 60V / 20A switched load
- · Multiple connection headers for
- high-current wiring

 Built-in pulldown resistor to ensure Drive directly from an Arduino digital output
 Dimensions: 23(W) x 18(H) x 5(D)mm



Logic Level Converter Module for Arduino

Many of the most interesting sensors and devices are only available in 3.3V or even lower voltage versions, which can be a problem if you want to connect them to a 5V microcontroller such as an Arduino. This module easily connects different logic voltage levels together for bi-directional communication on up to 4 channels, allowing you to use low-voltage sensors with a 5V microcontroller.

- 4 bi-directional channels
- Easily connect 3.3V sensors and devices to 5V microcontrollers
- · Pass-through GND connection
- Dimensions: 18(W) x 16(H) x 4(D)mm



Cat.

Qty 1+

Run out of digital outputs on your microcontroller? No problem! Simply use this shift register expansion module to drive up to 8 devices using just 3 pins on your microcontroller. They can also be daisy-chained together so that you can drive 16 channels or even more without sacrificing precious output pins. Handy for all sorts of projects including driving LED 7-segment displays, dot matrix displays, multi channel relays and more

- 8 output channels per module
- Daisy-chain multiple modules together
 2 to 6V operation
- Blue power LED
- Dimensions: 23(W) x 16(H) x 4(D)mm



4 Channel Relay Driver Module for Arduino

Easily drive up to 4 relays using logic-level outputs from your Arduino or other microcontroller. Isolates your microcontroller from the relay coils using FETs, includes back-EMF protection, and works with a wide range of relays. Perfect for home automation projects when combined with relay SY-4052 and DIN-rail relay mounting base SY-4063.

- · Plugs straight into your Arduino-compatible board
- · Individual LED status display on every output channel
- LED status display for external power
 Drive relay coils of 5VDC to 24VDC
- (with external power supply)

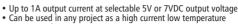
 Suggested relays like SY-4052 are rated at 2 x 5A @ 240VAC
- Dimensions: 36(W) x 23(H) x 12(D)mm

8 Channel Relay Driver Shield also available see page 12

Qty 5+ \$12.35 Cat. XC-4278 \$13.95

Power Regulator 28V (Switchmode) for Arduino

This regulator is a high tech switchmode supply with a selectable 5V or 7VDC output. The input voltage range of 6 to 28VDC is very flexible and it will not overheat at higher input voltages like the 7805 and other linear regulators may.

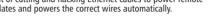


- power supply Can also be used for the EtherTen and EtherMega Power-over
- Ethernet for efficient switchmode supply remote powering Blue power LED
- 0.1" pitch standard header pads
- Dimensions: 21(W) x 33(H) x 6(D)mm

Cat Qty 1+

4 Channel PoE Midspan Injector for Arduino

Power up to 4 EtherTens or EtherMegas with DC from a low cost plugpack across your home or office network cables. This takes all the hard work out of cutting and hacking Ethernet cables to power remote boards, it isolates and powers the correct wires automatically.



- · 4 channels of input/output jacks
- 4 EtherTen or EtherMega boards can be connected directly and powered by standard network cables on the output side
- Commercial Power-over-Ethernet sources are not required
- Blue power LED
- Mounting holes
- Dimensions: 88(W) x 53(H) x 19(D)mm

7	Cat.	Qty 1+
	XC-4254	\$26.95

Power-over-Ethernet Regulator 802.3af Compliant for Arduino

Send power to your Arduino project over the network! This regulator module fits onto the Freetronics EtherTen or EtherMega to make them compatible with commercial 48V Power-over-Ethernet switches. It includes built-in smarts to communicate with the switch and negotiate a power rating for the device, then uses a switch-mode regulator to efficiently drop the 48V supplied via the LAN cable down to 7.5V for use by the Arduino compatible board.



- Implements the official 802.3af Power-over-Ethernet standard
- 48VDC in, 7.5Vdc out
- 12.5W maximum power rating
 Dimensions: 31(W) x 33(H) x 12(D)mm

7	Cat.	Qty 1+
	XC-4252	\$29.95

Real-Time Clock Module for Arduino

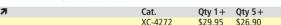
This handy module keeps accurate time for years using a tiny coin-cell, and is very simple to connect to your Arduino project. A driver library allows your program to easily set or read the time and date. Perfect for clock projects, dataloggers or anything that needs to know the date and time.



- Keeps time without power using a CR1632 coin cell battery backup (supplied)

 • 236 Bytes of addressable non-volatile memory,
- save serial numbers and important values
- Add a Dot Matrix Display panel XC-4250 and our Arduino board for a huge clock!

- Ideal for datalogging projects
 Free software library and examples
 Dimensions: 23(W) x 18(H) x 5(D)mm



DID YOU KNOW...

Edwin Hubble (1889 - 1953)

"Hubble's Law" stated that galaxies move away from each other at a speed determined by the distance that separated them. He classified galaxies as per their distance, shape, brightness patterns and content.































Mechatronics - Motors

MOTORS

Standard DC Motors

THESE ARE NOT TOY MOTORS
Each motor briefly described below is a quality product with hardened drive shaft, sintered bearings and quality commutator brushes etc. They are ideal for any application where a compact high torque and reliable motor is required. Each motor is provided with a full data sheet which includes motor

speed/torque/current/efficiency curves etc. Generous discounts for quantity purchases.

- 2.3mm driveshaftM2.6 threaded mounting
- · Generously ventilated





	YM-2712	YM-2716	YM-2718
VOLTAGE	6	12	12
NO LOAD			
Speed (RPM)	16,200	14,500	14,600
Current (A)	0.55	0.28	0.67
AT STALL			
Torque (G.CM)	185	520	2,500
Current (A)	5.6	4.3	18
AT MAX EFFICIENCY			
Efficiency (%)	49.6	66.1	55.1
Power (W)	5.96	5.56	26.5
Speed (RPM)	11,000	10,950	10,850
Torque (G.CM)	80	100	252
Current (A)	2	1.5	4.5
AT MAX POWER			
Speed (RPM)	9,000	8,100	6,500
Torque (G.CM)	80	180	1,300
Current (A)	2.6	2.4	8.0
DIMENSIONS (mm)			
Diameter	27.6	27.6	35.8
Total length	51	57	71
Shaft Length	12.5	13	9.5
Shaft dia	2.3	2.3	3.175
Mounting thread dia	2.6	2.6	3
RPM Volt	Cat	Otv 1+	Otv 5+ Otv 10

7	RPM	Volt	Cat	Qty 1+	Qty 5+	Qty 10+
	16,200	6	YM-2712	\$6.95	\$6.25	\$5.50
	14,500	12	YM-2716	\$8.95	\$7.95	\$6.95
	14,600	12	YM-2718	\$12.95	\$11.35	\$10.35

Hobby Motors

Two models available. Ideal for hobbyist, experimenters, robotics and as replacements.

Cat.	YM-2706	YM-2707
Torque	Low	Medium
Operating volts	1.5-4.5V	1.5-4.5V
Nominal volts	3V	4.5V
Speed (no load)	12000rpm	12500rpm
Current (no load)	0.28A	0.25A
Speed (max eff)	8540rpm	9560rpm
Current (max eff)	0.69A	0.81A
Torque (max eff)	7.94gcm	17.86gcm
Diameter	20mm	23.6mm
Total length	25mm	25mm
Shaft length	8.1mm	6.5mm
Shaft dia	2mm	2mm



7	Cat.	Qty 1+	Qty 5+	Qty 10+
Low	YM-2706	\$2.95	\$2.60	\$2.30
Medium	YM-2707	\$3.95	\$3.45	\$3.15

Low Cost Motor / Gearbox Set

This unit comes complete with a 3V 12,000 RPM motor*. It can be stepped down (with the consequent torque multiplication) up to six times as follows:

manipilcation, up to	six times as follows.	-	
Specifications		ANGE	
12,000 x 12/48	3,000RPM		
3,000 x 12/48	750RPM	-	
750 x 12/48	187.5RPM	1	
187.5 x 12/48	46.875RPM		
46.875 x 12/48	11.72RPM		
11.72 x 12/48	2.93RPM		

The motor is fitted with a 12 tooth pinion and the small gear cluster is 12 tooth. The large clusters are all 48 tooth. Not all gears need to be used. The intermediate output shafts are hardened steel, 3mm dia. Also supplied are press fit pulleys. The whole

assembly snaps together. Hand tools are almost unnecessary.

*Motor can also be varied by changing input voltage but this lowers torque.

Motor cage - 40H x 25W x 28Dmm / Gearbox cluster - 40(W) x 25(D) x 30(H)mm

Main & intermediate shafts - 63 x 3mm Dia. Supplied in kit form.

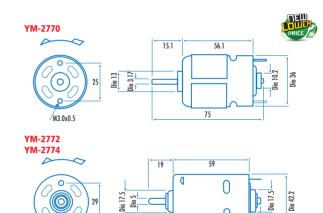
71	Cat.	Qty 1+	Qty 5+	Qty 10+
	YG-2730	\$9.95	\$8.75	\$7.75

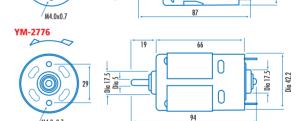
Standard (High Power) DC Motors

Astonishing speed and power from these compact ferrite magnet type DC motors. All units feature hard steel drive shafts, long life design and are built in an ISO 9002 quality environment.



	YM-2770	YM-2772	YM-2774	YM-2776
VOLTAGE	12V	6V	12V	12V
NO LOAD				
Speed (RPM)	11,800	20,000	18,800	9,700
Current (A)	0.8	4.0	2.6	1.3
Operating range (V)	6-12	3-6	6-12	6-18
AT STALL				
Torque (kg/cm)	2.7	1.91	4.9	6.0
Current (A)	26	67	92	57
AT MAX EFFICIENCY				
Efficiency (%)	76	57	71	73
Power (W)	43	45	107	52
Speed (RPM)	9800	13730	15520	8490
Torque (kg/cm)	0.42	0.32	0.67	0.60
Current (A)	4.7	13.5	12.8	6.0
DIMENSIONS (mm)				
Diameter	36	42	42	42
Total length	71	78	78	85
Shaft length	15	19	19	19
Shaft diameter	3.17	5.0	5.0	5.0
Mounting thread	M3	M4	M4	M4

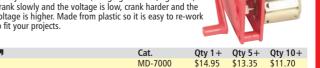




7	RPM	Volt	Cat	Qty 1+	Qty 5+	Qty 10+
	11,800	12	YM-2770	\$14.95	\$13.35	\$11.70
	20,000	6	YM-2772	\$18.95	\$16.95	\$14.95
	18,800	12	YM-2774	\$18.95	\$16.95	\$14.95
	9,700	12	YM-2776	\$19.95	\$17.70	\$15.70

Hand Crank Dynamo with Geared Motor

Here's a great gadget that will allow you to add Green power to any of your projects. What we have here is a hand crank dynamo, pre-assembled but easily modified to be retro-fitted to existing equipment or added to new projects. Crank the handle and the specially designed gear set will operate the motor and produce a DC voltage which can be used for a variety of low current uses (charging batteries, lights etc). Crank slowly and the voltage is low, crank harder and the voltage is higher. Made from plastic so it is easy to re-work to fit your projects.



MOTORS (CONTINUED)

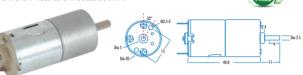
12V DC Reversible Gearhead Motors

The motors work equally well in forward or reverse motion. More specifications available on our website.

	YG-2732	YG-2734	YG-2738
Torque/cm	2.1kg/cm	12.0kg/cm	50kg/cm @ 55RPM
Rated Voltage (Volts)	12.0V	12.0V	12.0V
Operating (Volts)	4.5 - 18Vmax	4.5 - 18Vmax	6 - 12Vmax
Current - no load (mA)	30mA	70mA	<450mA
Current - full load (mA)	390mA	1380mA	14A
Gear ratio	82:1	244:1	50:1
Shaft speed	70RPM	36RPM	160RPM

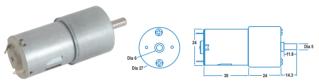
YG-2732

This compact unit will give a massive 2.1 kg/cm of torque at 70RPM Current draw rises to a modest 390mA.



YG-2734

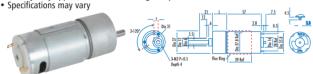
Only slightly larger than the unit above, but with a massive increase in torque at 36RPM. Ideal for driving wheels or other traction devices.



YG-2738

TECHATRONICS

For heavy duty applications. Massive 50kgs torque at 55RPM



7	RPM	Volt	Cat	Qty 1+	Qty 5+	Qty 10+
	70	12	YG-2732	\$12.95	\$11.35	\$10.35
	36	12	YG-2734	\$19.95	\$17.70	\$15.70
	160	12	YG-2738	\$39.95	\$35.90	\$31.90

GEARBOX SPEEDS

Note: All DC motors and motor gearboxes can change speed to a considerable amount by changing voltage within specified limits. This reduces need for special gear ratios for your application.

12VDC 48 Step / 7.5° Stepper Motor

Standard 48 step / 7.5° design, with flange mount 3.0mm hardened steel shaft. Suitable for object control, numerical control etc...

Ť				
Specifications				
Rated voltage	12VDC			
Rated current	1.1A/phase			
Phases	4			
Steps per revolution	48			
Stepping angle	7.5°			1
Drive method	Unipolar chopper drive)
Resistance per winding	20 ohms	,		//
Starting frequency	600pps (max)		,	_//
Holding torque	700g/cm	, –		///
Q155	93.5 Ø3 15 15 15 15 15 15 15 15 15 15 15 15 15	225		LEFE LEFENTY
7	Cat.	Qty 1+	Qty 5+	Qty 10+
	VM_3	75/ \$10.05	\$17.70	\$15.70

Stepper Motor Interface Module for PCs

Control the speed and direction of a 4-pole stepper motor, rated between 5 to 18VDC @ 2 amps max, via your computer. Connected to the parallel port of your PC and using the supplied software you can control the motor directly with the keyboard, or programme for forward and backwards with an adjusted number of cycles. Requires a split rail DC power supply rated at motor specifications (between 5 and 18 volts)

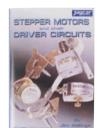
- Supplied with 3.5 inch disk.
- Dimensions: 120(L) x 50(W) x 23(H)mm
- Can be used with our stepper motor - YM-2754
- Power handling: 1A nominal, 2Ă max



Otv 10+ Cat. Otv 5+ AA-0352 \$59.95 \$53.95 \$47.90

Stepper Motors and their Driver Circuits

Make stepper motors work for you.
This book is filled with comprehensive information on the motors, the circuits that power them and the PC programmes that can control them. Written for the hobbyist and control them. Written for the hobbyts and experimenter you'll learn to understand motors, driver board kits, bit patterns, components, testing debugging and even torque measurement. All the things you need to maximise the use of motors in many applications.

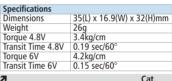


7	Cat.	Qty 1+
	BM-1510	\$15.95

SERVOS

Mini Servo 4.8V-6V

Mini sized servo perfect for remote control or robotics applications where size is at a premium.





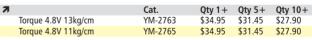
Cat.	Qty 1+	Qty 5+	Qty 10+
YM-2760	\$19.95	\$17.70	\$15.70

Servo Motor - Standard 6V with Metal Gear - 13kg

These metal gear servos are an excellent replacement for the standard servos commonly used in all 1:10 and many 1:18 scale remote control cars, or for use in any number of robotics applications. They feature digital control and super-tough metal gear construction with very high torque and super-quick rotational speeds. Perfect for the steering servo on an off-road truck or buggy where precise control and strength are needed.

- High speed and high torque digital servos
- Dual ball bearing
 Metal gears for maximum strength and durability
- Operating Voltage: 4.8-7.2V
- Connector wire: 32cm Includes control horns and screw set
- Weight: 55g
 40.7 x 19.7 x 42.9mm (standard servo size)

OPERATING SPEED 4.8V: 0.25 SEC/60° Cat. YM-2763 OPERATING SPEED 4.8V: 0.20 SEC/60° Cat. YM-2765



Heavy Duty Servo 4.8V-6V

A heavy duty servo which won't make a heavy duty dent in your wallet. Features include ball bearing, high torque and quick transit time.





7	Cat.	Qty 1+	Qty 5+	Qty 10+
	YM-2766	\$29.95	\$26.90	\$23.70

Mechatronics - Solenoids & Power

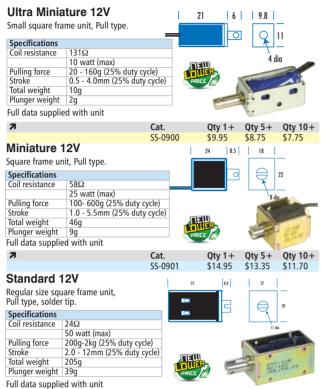
SOLENOIDS

Range of DC & AC solenoids and actuators. Made to our factory specifications. You can safely design them in knowing that they will be available over the long term. Generous quantity discounts. See website for datasheets.



Qty 5+ Qty 10+

\$22.35



Tubular 12V

Compact size,	Push type.		43.5	8.9	19.2	17.9 dia
Specifications		1 4				
Coil resistance	25.6Ω	1_4		XW.		
	20 watt @ 25% duty cycle			14 di	ia	
Pulling force	220 - 940g (25% duty cycle)	THE COLUMN	_		and the last	
Stroke	1.0 - 6.0mm (25% duty cycle)	LOWE		1	STATE OF THE PARTY.	-
Total weight	81g	PRICE		-		
Full data suppl	ied with unit			1		

Cat.

SS-0902

\$24.95

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	SS-0903	\$24.95	\$22.35	\$19.70

240VAC

Standard steel lamination design Push-pull type. Rated for continuous use.

Specification	S
Pull force	9.8N (1.0kg)
Voltage	240VAC 50Hz/60Hz
Stroke	15mm fixed
Total weight	362g
Standard cade	dle type actuator

Full data supplied with unit

7		Cat.	Qty 1+	Qty 5+	Qty 10+
		SS-0904	\$29.95	\$26.90	\$23.70
12VDC Soler	oid Valve		L	61.8±0.5	
Air valve solenoid, Standard 1/4" Barb	normally closed. type hose fittings			}	
Specifications			7.2+0.2		
Operating voltage	12VDC	37.310.3	1		
Operating current	350mA	∅5.60	- WILL	NW	
Air Leakage	1cc/min max at 4 PS				
				dikw.	- 11/hi

Cat. Qty 5+ Otv 1+ SS-0905 \$14.95 \$13.35 \$11.70

TAMIYA POWER TRANSMISSION COMPONENTS

Planetary Gear Box Set

Automatic transmissions in cars use planetary gear clusters. They are simple, compact, and strong. This gear set made in Japan by TAMIYA is sensational. Why? First you can configure the gearbox to 8 different reduction rates 4:1, 5:1, 16:1, 20:1, 25:1, 80:1, 100:1, and 400:1. A genuine Mabuchi RC 260 3VDC motor is included! (At 400:1 the gearbox gives a massive 15kg/cm of torque!) Typically Japanese, it is thorough.

Absolutely everything is supplied including tubes of lubricating grease, mounting feet, two drive attachment cranks and a beaut brass double female coupling to connect to other (drive) shafts. You will love this

- Measures 100(L) x 28(dia of body) mm, height including mounting feet
- Steel output shaft 4mm dia Can be ganged for up to (max) 160,000:1

product!

Moulded out of sturdy ABS plastic



YG-2720 \$35.00 \$31.45

Single Motor 4 Speed Gearbox / Axle Assembly

This brand-new Tamiva product features an all plastic moulded gearbox and motor casing. Included is a FA-30 type 3 volt electric motor, axle with 2 crank arm and tube of grease

12.7:1 38.2:1 114.7:1



Double Motor Independent 4 Speed Gearbox / Axle Assembly

Basically a double version of the unit above Each motor can be separately driven and therefore when wheels are connected could rotate on the spot. Each gearbox is independent so it is possible to set different gear ratios for each box. Includes 2 x FA-30 type 3 volt motors.

The following gear ratios are user selectable: 12.7:1 38.2:1

114.7:1 344.2:1

7	Cat.	Qty 1+	Qty 5+	Qty 10+
Double	YG-2741	\$19.95	\$17.70	\$15.70

2 - Shaft Universal Motor / Gearbox Set

This gearbox has a main output shaft exiting either side of the gearbox (to drive wheels, for example) and another single-ended shaft at 90° to the former. The gear set can be configured to give 3 set speeds.

· Metal chassis, includes motor.



Universal Plate Set

The main component of this set is an ABS plastic plate, 160 long x 60 wide with a grid of 3mm holes all over on a 5mm x 5mm pitch. This plate makes an ideal base for a small robot, automotive device or chassis for a power transmission system. Also included are bracket bearings, L-beams, nuts, screws etc. Surprisingly strong.





Qty 10+ Qty 5+ Worm YG-2865 \$8.95 \$7.95 \$6.95

MECHANICAL COMPONENTS FOR DRIVE TRAINS

Pulley Sets

This set would typically be used to transfer power in small energy systems Set includes 2 each 30 & 20mm diameter pulleys and 4 x 11mm pulleys. Also included are bushings, screws, nuts and 1 metre of rubber drive band. This type of system will absorb transmission shock.

Similar to the unit above, but with 2 x each 50 & 25mm pulleys, 2 x 11mm pulleys, bushings, screws, nuts and 1 metre of rubber drive band.







at. (Qty 1+	Qty 5+	Qty 10+
G-2868 S	\$9.95	\$8.75	\$7.75
G-2869 S	\$9.95	\$8.75	\$7.75
	i-2868	G-2868 \$9.95	G-2868 \$9.95 \$8.75

Tamiya Truck Tyres

Set of 4

Build your own model car or truck.

Comes with

4 x 36 mm(dia) tyres

 4 x 28 mm (dia) hubs • 2 x 100 mm (L) rods





7	Cat.	Qty 1+	Qty 5+	Qty 10+
	YG-2860	\$6.95	\$6.25	\$5.50

Tamiya Sports Tyre

Set of 2

- 14 x 3 mm Nuts

- 2 x wrench



7	Cat.	Qty 1+	Qty 5+	Qty 10+
	YG-2862	\$12.95	\$11.35	\$10.35

Tamiya Track & Wheel Set

The Tamiya Track & Wheel gives you tank-like traction for your robotics project. The mix of parts in the set provides flexibility

to the constructor by providing a good mix of track lengths, with both large and small road wheels. By using all parts you can produce a tank-like drive or by removing the road wheels you can have a simple track configuration.

Included components are:

- 2 x 30 link tracks 190mm long approx.
 • 4 x 10 link tracks 66mm
- long approx.
 4 x 8 link tracks 57mm long approx.
- 2 x large drive sprockets 32mm dia.
- 2 x large idler wheels 32mm dia.
- 6 x large road wheels 22mm dia. 10 x small road wheels 11mm dia
- 1 x drive shaft and 5 x 3mm standard shafts.



TAMITYA

(PRICE	
Qty 5+	Qty 10+	
\$13.35	\$11.70	

6.35mm (1/4") Shaft Coupler

Sturdy solid steel sleeve with black Japanned finish, this device connects 2 x axial shafts together that are closely aligned by hex drive set screws.





• 19mm (3/4") long x 12.7mm (1/2")dia

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	YG-2790	\$6.95	\$6.25	\$5.50

Spider Coupler Set

Connects a motor to a shaft that may be slightly misaligned or under length. You may also need a torsional shock absorbing coupling which this does as well.





• Each hub will accept a 6.35mm (1/4") shaft with set screws anchor

• The hubs are coupled by a synthetic rubber spider

• 20(dia) x 30(L)mm

, , , ,				
7	Cat.	Qty 1+	Qty 5+	Qty 10+
	YG-2782	\$14.95	\$13.35	\$11.70

Aluminium Hub with Set Screws

This device will accept a 6.35mm (1/4") shaft, set screw fixed, and connect to the flat face of a gear, typically the flat side of the larger 48 pitch gears.





Coupling from the gear to the hub by 4 x set screws provided. This enables a motor to be securely fastened to a driving gear.

Hub 7/8" (22.5mm) dia.

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	YG-2784	\$6.95	\$6.25	\$5.50

POWER TRANSMISSION COMPONENTS

These precision engineered components are a delight to play with. They offer solutions to small power transmission problems. We make no apologies for the price because well, they are German and they are magnificent quality.

Solid Shaft Couplers (Female)

Machining from solid brass stock — 16mm long, 12mm diameter. Type I will connect 2 shafts on a common axis. Type II will reduce from 6.0 diameter to 4.0 diameter.

· Shaft fixed with grub screws.

TYPE I Cat. YG-2600







Cat. 10-2002			- 10	2002
7	Cat.	Qty 1+	Qty 5+	Qty 10+
Type I	YG-2600	\$7.95	\$6.95	\$6.25
Type II	YG-2602	\$7.95	\$6.95	\$6.25

Right Angle Shaft Couplers (Male)

Basically a right-angle cast housing with 45 degrees nylon bevel gears permanently coupled. One shaft is enclosed with a panel-mount style threaded bush (similar to a potentiometer mount) which is 10mm long

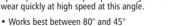
- Two mounting nuts and a lock washer are provided.
- · All metal parts are nickel plated.

· Each shaft is 10mm long.

7		Shaft	Cat.	Qty 1+	Qty 5+	Qty 10+
	Type II	2 x 4mm	YG-2612	\$49.95	\$44.90	\$39.90

Double - Stage Classic Style Universal Joint (Female)

Similar to YG-2606 but with 2 brass couplings set inside a nylon spider. It will couple up to 90 degrees but it will wear quickly at high speed at this angle.



Grubscrews fixing 6.0mm diameter shafts





\$39.90

All-Metal Universal Joint (Trunnion Style) Female 6.0 Dia.

This is a low torque coupler that will couple offset shafts by up to 2mm and 15° off-angle. Shafts are clamped by collet-type fixing i.e. a nut compresses a slotted bush compressing it onto the 6.0mm diameter shafts.



· Nickel plated

71	Cat.	Qty 1+	Qty 5+	Qty 10+
	YG-2604	\$24.95	\$22.35	\$19.70

Drive Shafts

Plastic shafts, handy for use in drive systems or to use with a coupler to extend the length of a pot shaft. 6mm diameter.

Two lengths available: 60mm long Cat. YG-2620 120mm long Cat. YG-2622

···				
7	Cat.	Qty 1+	Qty 5+	Qty 10+
60mm long	YG-2620	\$8.95	\$7.95	\$6.95
120mm long	YG-2622	\$9.95	\$8.75	\$7.75

\$14.95

YG-2867

Mechatronics - Gears & Kits

Gear Set & Spur Gear Set

Gear set contains one pinion gear and two different sizes of



7	Cat.	Qty 1+	Qty 5+	Qty 10+
Gear Set	YG-2630	\$8.50	\$7.50	\$6.75
Spur Set	YG-2632	\$6.95	\$6.25	\$5.50

Worm Drive Set

YG-2630

This set consists of a worm gear 24mm long x 12mm dia with an 8 turn worm screw. The worm has a 2.8mm axle hole which could probably be carefully drilled out to a larger diameter. The spur gear is 1/4" (6.35 wide) and 1 & 5/8" (41.2mm) diameter with a number of regular pitch-concentric 2.8mm holes across the face of the gear including one dead centre. It would be drilled out to accommodate a larger shaft. This gear has 40 teeth. Both are moulded in an engineering grade



7 Piece Drive / Belt Set

This set consists of 4 x split pulleys. There are 2 sets of 30(dia.)mm; one has a 2.8mm centre hole, the other 4.0mm. These pulleys have brass & plastic bushing sets as well. The smaller pulley sets are 13.8 (dia.) & 8.0 (dia.)mm respectively. A 70 (dia.)mm rubber drive belt is also included.



7	Cat.	Qty 1+	Qty 5+	Qty 10+
	YG-2640	\$14.95	\$13.35	\$11.70

CLOCK MAKING

Quartz Clock Movement

MAKE A CUSTOM CLOCK OR REPAIR AN OLD ONE This is a standard hour/minute/sweep second movement found in almost all electric clocks worldwide. Very reliable Standard nut bushing mount. We have sold 10's of thousands of these and, as far as we can tell, not one has come back

- Very compact 56 x 56 x 15mm
- Self starting one second stepping motor
 Uses 1 x AA battery that lasts 1 year
- ±15 second/month accuracy
- Supplied with three sets of hands
 Shaft length 19mm, diam. 7.5mm

•	Includes	sweep	second	hand.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	XC-0100	\$12.95	\$11.35	\$10.35

MECHATRONICS & ROBOTICS - BOOKS

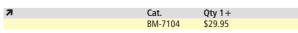
123 Robotics Experiments For The Evil Genius

Frankly, the "Evil Genius" series of books started a few years ago and the publisher realised that it grabbed the attention of many. We reviewed one early title and were horrified at the VERY DANGEROUS projects described therein. This book, however, is an absolute delight. Written by the brilliant Myke Predko, the book starts with the basic concepts of robotics. In many ways it starts at "Too Simple" We mean this because Myke describes a couple of silly projects to start, i.e. a "doll" made out of the cardboard tubes from toilet paper rolls. He gets into gear quickly, however. (Start reading from page 15 and have an inches metric conversion table handy!) The projects & concept explanations come at a fast pace. You will learn about all the concepts needed for basic robotics technology & have



all of the components described to you as well. You will get the basics at a bit of a rush - so that you can get to real robotic control - through the BASIC Stamp microcontroller. Before you know it, you will have serious knowledge of robotics. Indeed this book even includes a double-sided plated-through PCB that you will need for many projects. A board such as this could cost almost as much as the book itself if sold separately. So let's be tough & call the book 121 Robotics Projects. Either way it is THE book for someone who wants to get into this fascinating technology.

• Softcover 275(H) x 215(W)mm



ASURO & STIRLING KITS

Asuro Programmable Robot Kit

Asuro is a kit developed at the German Centre for Air and Space Travel for an autonomous multi-sensor robot. In addition to six collision sensors and an optical unit for following a line, Asuro has two odometers and several display elements. The supplied duplex infrared interface permits wireless programming, as well as a remote control with a PC. The "brain" of the robot is a RISC processor that also permits the processing of complex programs. Programming is carried out in C, where predefined functions can be accessed to actuate the two motors, the sensors and displays. A detailed instruction manual describes the assembly process and the installation of the software as well as step-by-step



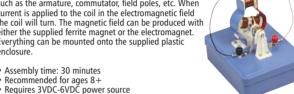
instructions on programming the Asuro using numerous examples. Asuro is ideal for hobbyists, school and student projects, schools, training in the electrical engineering and mechatronics fields as well as university courses. This is not a kit for the faint-hearted! Some soldering required.

• Programming required - suitable for 14+

	_	_	•				
7				Cat.	Qty 1+	Qty 3+	Qty 6+
				KR-3120	\$79.95	\$71.95	\$63.95

Mini Electronic Experiment Motor Kit

Construct a simple little electric motor for a clear understanding of how the technology works. All the main components to create a working DC motor are included such as the armature, commutator, field poles, etc. When current is applied to the coil in the electromagnetic field the coil will turn. The magnetic field can be produced with either the supplied ferrite magnet or the electromagnet Everything can be mounted onto the supplied plastic



- Assembly time: 30 minutes

- Dimensions: 132(L) x 104(W) x 90(H)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	KJ-8902	\$19.95	\$17.70	\$15.70

Stirling Engine Project Kit

A Stirling engine is a machine that converts heat into mechanical energy by alternately A String engine is a machine that converts heat into mechanical energy by alternately compressing and expanding air. The expanding air acts on a piston to provide mechanical force: you simply heat up the air chamber, give the flywheel a whirl and away she goes. The only source of energy is heat and as long as heat is applied, the engine will keep running and running. The principle behind the Stirling engine is being utilised in some large-scale thermal/solar energy systems and while you won't quite be able to power your house with it, it's still a fascinating and educational project for the union mad scientist to experiment for hours with Made in Germany our Stilling angine. junior mad scientist to experiment for hours with. Made in Germany, our Stirling engine is beautifully engineered from stainless steel, brass and a genuine timber base. It has 2 ball bearings and should become an heirloom



	Commence CO			
Cat.		Qty 1+	Qty 3+	Qty 6-
YM-2923		\$249.00	\$225.00	\$198.9

DID YOU KNOW...

Charles Augustin de Coulomb (1736 – 1806)

A French physicist who is best known for developing Coulomb's law, the definition of the electrostatic force of attraction and repulsion. The SI unit of charge, the coulomb, was named after him.

Mechatronics - Robot Construction Kits

ROBOTIC CONSTRUCTION KITS

3 in 1 All Terrain Tracked Robot

There are a lot of parts to assemble in this kit, including the hard-wire remote control. You do, however end up with a fantastic piece of robotic gear. It is primarily a terrestrial 6 track (i.e. 3 separate tractor-crawlers each side) unit. The reawlers can be reconfigured to operate as grippers, or even as a forklift type mechanism. You will need lots of time to put this thing together, but it will be a pleasure as the 50 page instruction manual is superb with dozens of good oldfashioned line drawings, which are still the best for clarity. There is very little electronics (indeed none really) but a tremendous amount of mechanical assembly. Electric motors are included.

This kit could form the basis of a sophisticated robotic platform with the addition of feedback systems, much of which is in the Jaycar catalogue.

- It would make a fabulous gift for a very bright 13 + year old

 • Batteries AA x 4 are extra
- Carton dimensions 40(W) x 30(D) x 90(L)mm





7	Cat.	Qty 1+	Qty 3+	Qty 6+
	KJ-8918	\$49.95	\$44.90	\$39.90

Robot Arm Kit with Controller

This arm is a must for budding robot enthusiasts and operates just like the real thing. It is capable of 5 separate movements and can easily perform complex tasks. Individual control is available for opening and closing the illuminated gripper plus control of wrist, shoulder, elbow and base rotation. The arm is supplied as a kit of parts and makes an excellent project for anyone interested in robotic construction and basic electrical connections.

• Suitable for ages 12+

Specifications	
Max lift capacity	100g
Gripper opening	43mm
Maximum reach	320mm
Wrist movement	120°
Elbow movement	300°
Shoulder movement	180°
Base rotation	270°
Requires	4 x D cells
Base dimensions	225(L) x 160(W) x 40(H)mm





USB INTERFACE KIT FOR KJ-8916

Add computer control via USB to your Robotic Arm. The kit includes everything you need - interface cable, pre-built PCB, enclosure and software for controlling function. You can use a keyboard or mouse to have real-time control of the robotic arm, or you can program, edit and load individual functions and movements, just like a real industrial robot. The commands are saved just like a normal computer file to be loaded and used later.

7		Cat.	Qty 1+	Qty 3+	Qty 6+
	Robot Arm with Controller	KJ-8916	\$69.95	\$62.95	\$55.95
	USB Interface Kit	KJ-8917	\$49.95	\$44.90	\$39.90





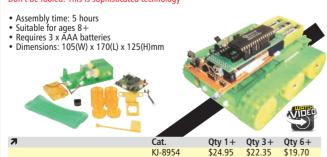
Artificial Intelligence (AI) Dark Line Tracer Kit

A great introduction to the world of automated robotics. Once assembled, this robot will dutifully follow a thick dark line. It's able to achieve this feat with the help of two light sensor 'eyes' connected to the micro-controller on the circuit board. Many real world robots, such as those used to navigate through warehouses to pick stock from shelves, use a similar principle. Included in the kit is the chassis, 2 tracks, the circuit board, wheels, and all the screws to join it together.





Don't be fooled! This is sophisticated technology

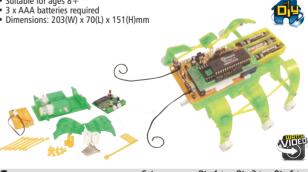


Artificial Intelligence (AI) Bumper Bug

Build a big green 6 legged bug with some rudimentary artificial intelligence. The bug is capable of detecting when it bumps a wall and can alter its course accordingly thanks to it's wall sensing eyes.



Assembly time: 3 hours Suitable for ages 8+



Cat. Otv 3+ KJ-8956

Kits for Kids - Robots & Green Power

In keeping with our Science and Engineering theme, we have been introducing Educational/Scientific/Engineering orientated kits for a number of years. Many of the kits have been spectacularly popular but a few have been duds which are quickly discontinued. The new offerings are clearly marked and you can be assured that existing lines are proven.

Giving a bright young mind one of these project kits may be the best thing you ever do! Just think, a nobel inspiration!



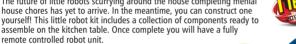
Remote Controlled Tank Kit

First developed to break stalemates that resulted from trench warfare in world war 1, tanks have become the mainstay of military forces throughout the world. To this day they are an invaluable tool in front line fighting. Educate the next generation with this excellent little kit. Components include the chassis, 2 x tracks, a hull, turret, 2 gun tubes, one gun support and all the wheels. Assemble the pieces and you will have a fully functioning tank ready to roll out!



Remote Control Robot Kit

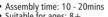
The future of little robots scurrying around the house completing menial house chores has yet to arrive. In the meantime, you can construct one yourself! This little robot kit includes a collection of components ready to assemble on the kitchen table. Once complete you will have a fully



KJ-8950

\$34.95

\$31.45



- Assembly time: 10 20mins
 Suitable for ages: 8+
 Requires 3 x AAA batteries for main unit
 Requires 3 x AAA batteries for remote control
- · Dimensions: 125(H)mm approx





LEARN ABOUT GREEN POWER

6-in-1 Solar Educational Kit

A brilliant kit for any junior eco-scientist. You can build any one of six different projects from the parts in the kit, then make them work by solar power. No tools, soldering or glue required. All the parts snap together with spring terminals for the wiring. The instructions are excellent with extremely clear and concise illustrations detailing every step.



Qty 3+ KJ-8926 \$19.95 \$17.70 \$15.70

6 In 1 Solar Educational Robot Kit

A hands on experience in the world of solar power. This kit includes all the parts needed to construct up to six different projects. Choose between a robot, helicopter, plane, windmill, water skies or even a three wheeler! Don't even

worry about screws, everything snaps together for easy assembly and its all solar powered so no batteries are required. For the best results, use it in direct sunlight. For cloudy days use a 50W halogen light.



vviiiuiiiii	102 x 102 x 130111111
Helicopter	234mm
Water skier	140 x 75 x 95mm
Three wheeler	65 x 50 x 60mm
Robot	50 x 85 x 45mm
Plane	185 x 185 x 130mm

• Suitable for ages 10+

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	KJ-8936	\$19.95	\$17.70	\$15.70

8 in 1 Solar Educational Kit

If you loved our 6 in 1 solar educational kit then you will love this even more! Enable your kids to construct one of 8 scientific kits that will not only keep them occupied for hours but they will also learn about solar technology at the same time. No tools,

soldering or glue required. The finished projects are solar powered, but can also be powered by the light from a household 50W halogen light. Each project is easy and fun to build with a detailed instruction manual included.

Projects: • Car

- Riverboat
- Octopus
- Spaceship
- Solar Street Light Robot
- Windmill
- Adjustable solar



Solar Powered Windmill

A novel item that reminds us of the importance of sustainable renewable energy. It looks like a windmill, but it is actually solar powered. Shine a bright torch on its solar panel and watch the blades spin - the brighter the light the higher the RPM. Made from ABS plastic.

- Suitable for ages 10+
- Base dimensions: 65(L) x 65(W)mm
 Height: 160mm

Cat. Qty 1+ GT-3754 \$6.95



LEARN ABOUT GREEN POWER (CONTINUED)

Rechargeable Mini Solar RC Car

An educational and fun way to teach your children the benefits of solar power and renewable energy sources. This neat little remote control car runs on solar power! It has a solar panel on the roof of the car charging the on-board rechargeable batteries. It also has a charge dock station for the remote control. Despite being green, the car is very zippy thanks to its lightweight design. A full functional RC car, it has forward, reverse, left and right controls. Also comes



- included Suitable for
- ages 8+
 Dimensions: 240(L)mm



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	GT-3699	\$29.95	\$26.90	\$23.70

Salt Water Fuel Cell Powered Car

This car uses a simple, environmentally friendly fuel cell to power small electric car for hours of very safe fun. All that you have to add is water and tablespoon of salt! Comes as a self-assembly kit. Includes 3 fuel cell sheets, non woven fabric separator and air cathode

• Suitable for ages 8+ Car dimensions: 75(L) x 40(W) x 18(H)mm

Pack of 5 replacement fuel cell cartridges sold separately Cat. KJ-8941

7		Cat.	Qty 1+	Qty 3+	Qty 6+
	Powered Car	KJ-8921	\$12.95	\$11.35	\$10.35
	Spare Fuel Cell Cartridge Kit	KJ-8941	\$4.95	\$4.45	\$3.90

Wind Powered Eco-biker

This cute little kit assembles up into a wind turbine powered model bicycle rider. The wind turbine operates the riders arms, legs and body. If the wind is strong enough it generates enough electricity to run the bikes LED headlight! The assembled unit is designed to mount in the neck of a softdrink bottle or - appropriately - on the handlebars of a bicycle. (Mounting parts included.)





Solar Formula 1 Car Kit

Build your own solar F1 car and explore the world of solar power. Easy to assemble mini Formula 1 car with built-in electric motor. No glue required - all the pieces simply snap together. The solar cell provides the power and it will run from sunlight or a 50W halogen globe.

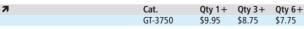
Suitable for ages 10+ Dimensions: 90(L)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	GT-3753	\$14.95	\$13.35	\$11.70

Micro Solar Car Racer

Probably the smallest solar powered car in the world. Don't let its miniscule size fool you, yes it actually does work! Shine a lamp on its solar panel and watch it travel across your desk. Shine a higher powered torch on it and you'll see it take off at a surprisingly furious pace. Comes in its own see-through screw top case

• Suitable for ages 8+
• Dimensions: 31(L) x 20(W) x 15(H)mm



7-in-1 Solar Rechargeable Station Kit

A fantastic solar science kit that teaches children the different ways of powering and charging a machine. The kit comes with all the snap together plastic parts required (no need for glue), a solar panel, micro rechargeable battery and all the other accessories. Initially the kit is assembled into a recharging station but can then be transformed into a truck. You can also build concept car, concept racer, dump truck, bulldozer, or solar powered car. Includes stickers to add some flare to your vehicles

May require the use of a side cutter, scissors and 3 x AAA batteries

Assembly time: 2 hours

 Recommended for ages 8+ Charging Truck dimensions: 105(L) x 55(W) x 41(H)mm

Cat Qty 1+ Qty 3+ KI-8964 \$22.35 \$24 95

Salt Water Fuel Cell Engine Car Kit

An entertaining educational kit demonstrating the concept of a salt powered automotive engine. It gives the next generation a look at alternative means of propelling cars of the future. It works with a combination of salt water and magnesium plates. When salt water is added it dissolves the magnesium to form hydrogen which is attracted to the cathode creating a flow of electrons. A detailed step by step assembly manual for connecting the myriad of components is included and the car engine can be configured as a V8 or flat engine. The cylinders also move up and down as the car moves forward. The finished vehicle is 4 wheel drive and the body will twist as it navigates its way over small pebbles and bumps. Watch a demonstration video on our website

You may require the use of a side cutter and flat/phillips head screwdrivers.

Assembly time: 3 hoursRecommended for ages 8+

• Dimensions: 120(L) x 100(W) x 91(H)mm

KJ-8960 \$24.95 \$22.35 \$19.70

PC Programmable Line Tracer Kit

An educational introduction to the world of robotics and programming. Assemble the kit and you are able to use it in two main ways, programming mode or line tracing mode. With the supplied software you are able to program instructions into the robot to navigate its way across the floor. In line tracing mode, simply draw a line on some paper with a thick black marker and the robot will follow the course. It accomplishes this with two optical sensors, somewhat similar to a common garden bug.

Assembly time: 2 hours
Requires: Box cutters, phillips head screwdriver (no.2 size), long nose pliers (TH-1887)
Requires 2 x AA batteries

Software is compatible with Windows XP, Vista, and Windows 7 (Vista users may need to run the software in WinXP Service pack 2 compatibility mode) Recommended for ages 12+

Dimensions: 120(L) x 64(W) x 55(H)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	KJ-8906	\$34.95	\$31.45	\$27.90

Solar Powered Grasshopper Kit

Are your children fascinated with insects? This mini solar powered grasshopper is easy to assemble and will keep them occupied for hours. Runs from sunlight or by a 50W halogen bulb. Small enough to fit in











Freecall order hotline: 1800 022 888

Kits for Kids - Green Power

LEARN ABOUT GREEN POWER (CONTINUED)

Water Powered Vehicle Kit

Build up to 13 different water powered vehicles and watch them move! This kit demonstrates two different ways of powering vehicles with water, a pump based water recycling system and ones using a simple water jet. The former uses a pump and water tank to create a hydro pneumatic system where water pressure creates energy to move a gear. The water jet simply uses a build up and release of pressure to propel the vehicle forward. A fully illustrated 48 page instruction manual is included.





· Hydro pneumatic vehicles: Car, antique car, locator car, excavator, truck Water jet engine: Fork lift, propeller

plane, vintage car, helicopter, dragster, rescue vehicle, excavator,

Assembly time per vehicle: Approx 30 minutes
 Recommended for ages 8+

• Dimensions: 370(W) x 290(H) x 80(D)mm



Wind and Solar Powered RC Cars

Toy cars are always on young boys' birthday or Christmas wish lists. Oblige them with one of these mini remote controlled cars that will surely entertain but also educate curious minds about the concept of wind and solar power. The kits are very simple to build and come with a manual that provides construction details and explains how alternative energy can generate electricity.



Solar Powered/Dynamo Robot Kit

Build your own solar powered robot. Also supplied with a hand cranked dynamo for alternative power source. Robot moves forward and reverse. Hours of robotic fun.

 No batteries needed • Suitable for ages 8+

Solar Powered Car





7	Cat.	Qty 1
	KJ-8821	\$9.95

Solar Powered Planetarium

Young astronomers will love this mini solar kit. With real solar energy, the planets orbit around the solar panelled sun. Easy to build and loads of fun, take it outside and under direct sunlight then watch the Solar system come to life. Not only does it provide a hands-on lesson about how solar power drives a motor, but also gives some educational pointers on planets and the solar system. May also be operated by a 50W halogen bulb.

- 6 colours of opaque acrylic paints and paint brush
 Planets including Earth,
- Mars and Jupiter Solar panel with motor
- · Detailed instruction manual
- Suitable for ages 10+
 Dimensions: 210(L) x 180(W) x 55(H)mm



Mini Solar Bullet Train Kit

All aboard the solar hullet train! This kit is an excellent way to teach how solar power is used to drive a small motor. Perfect for train enthusiasts!

- Includes 18 parts, 4 screws, and 1 mini solar panel
- Suitable for ages 10+
 Dimensions: 205(L) x 155(W) x 45(H)mm







Qty 3+ Cat Qty 1+ Qty 6+ KJ-8929 \$9.95 \$8.75 \$7.75

Mini Wind Generator with LED

Quite possibly the world's smallest wind generator! Blow on the rotor blades and create electricity to power two blue and one green LED. Made from durable ABS plastic. A novel educational gift for young and old.

- Blade diameter: 60mm
- ABS plastic stand height 170mm • Ideal wind speed around 9.6km
- per hour if used outdoors
- Small components, ages 8+





Cat



GT-3752 \$9.95

Solar Educational Kit

Experiment with solar energy - the energy source of the future. Our solar educational kit is designed to let you build your own solar models. The kit comes complete with:

- Solar cell module
- Solar energy booklet explaining the why & hows of solar energy Small DC motor
- Screws and nuts
- Wire with motor clips
- Colour spinner discs · Paper aeroplane and bird models
- Plastic turntables with 4 sizes, 5/8", 1", 1.5" and 2"
- Plastic fan spinner
- Suitable for ages 8+





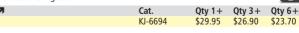
7	Cat.	Qty 1+	Qty 3+	Qty 6+
	KJ-6690	\$16.95	\$14.95	\$13.35

Deluxe Solar Educational Kit

A series of do-it-yourself experiments to acquire the basic knowledge of solar energy. Supplied with a solar panel which incorporates 3 x 1.5V cells for series or parallel connection.

The kit comes complete with:

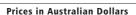
- Solar cell module with plastic stand
 Musical unit
- Plastic lamp
- · Small DC motor with stand
- Wire with motor clips
- 4 jumper wires
- Nuts and plastic spanner
- Colour spinner discs
- Paper aeroplane and bird models
- Plastic turntables with 4 sizes, 5/8, 1, 1.5 and 2 inch
- Plastic fan spinner
- 14 page solar energy booklet explaining the why & hows of solar energy Suitable for ages 8+



Hobby Solar Module

Ideal for powering solar projects, hobbies,

3 cells per module, rated at 1.5V.				4	
Specifications		11			
Open circuit voltage	1.5V	1			
Short circuit current	500mA	1			
Dimensions	148(L) x 74(W)mm		-	
Weight	33g]		
7		Cat.	Qty 1+	Qty 2+	Qty 4+
		ZM-9012	\$19.95	\$18.70	\$17.70



Ethanol Bio Fuel Energy Kit

Build your own desk fan and run it on your own bio-fuel. Generate your own electricity from ethanol (ethyl alcohol) using Direct Ethanol Fuel Cell technology. Bio fuels are an alternative to fossil fuels as they are generated from fermented plant matter, not from long-dead critters and plants. The kit contains everything you need to get your alternative fuel experiment off the ground, except the ethanol itself: you could use a solution of denatured alcohol which is available from pharmacies, hardware stores or chemical suppliers. Measuring cylinder is included for mixing up the required solution. If you're really keen, you could ferment your own, but check that this is legal first

as you would be manufacturing alcohol. One small

tankful will last for several days, and the kit includes testing strips to monitor how much useable ethanol is left in the tank. So once you've made the fuel you can put it to work running the desktop fan you assemble in the kit.

The kit includes ethanol storage tank, tubing, purging valve, supporting base, electric motor, wiring with crocodile clips, fan blades, Ethanol solution mixing container and pH measuring strips.

Suitable for ages 12+Adult supervision recommended

Will work with wine as well!



ETHANOL

Qty 1+ \$50.00

Hovercraft Experiment Kit

Hovercraft work by filling a 'cushion' with air, this air is then released under the skirting of the cushion once a certain level of pressure is reached which creates lift allowing the craft to fulfil its namesake, and hover. This kit is a fun practical way to demonstrate this technology. Glue the cardboard pieces together, install the motor and other components and you will have a fully functional hovercraft.



Assembly time: 2 hoursNot recommended for use on water

Requires 2 x AA batteries

Recommended for ages 8+
 Dimensions: 300(L) x 245(W) x 95(H)mm



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	KJ-8909	\$14.95	\$13.35	\$11.70

Balloon Powered Helicopter Propulsion Kit

This simple little kit demonstrates how helicopter flight is possible. Assemble the blades, blow up the balloon then attach to the blade axle and the air from the balloon will pass through a passageway of each blade causing them to spin. This rotational motion, coupled with the angled blade design allows for enough downward force for the kit to fly.

Assembly time: 43 seconds

Recommended for ages 5 Dimensions: 260(Dia) x 30(H)mm





Cat. Qty 3+ Qty 6+ KJ-8908 \$4.95 \$4.45 \$3.90

Principles of Electric Current Experiment Kit

A series of experiments with instructions to learn the common principles of electric current and magnetism. Check the magnetic poles of each coil with the compass, use some paper clips, the magnet and enamelled wire to create a spinning motor, or check the flow of current in the circuit by switching the battery thus inverting the current and magnetic field.



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	KJ-8901	\$9.95	\$8.75	\$7.75

SCIENCE PROJECT KIT

CSI Detective Kit

Learn how to lift fingerprints, even if they're hours or days old. Find out what the important characteristics used in analysing fingerprints are. The kit has enough material for multiple experiments.

• Suitable for ages 8+



Otv 3+ CSI Detective KJ-8934 \$9.95 \$8.75 \$7.75

Educational Science Kits

A collection of 5 do-it-yourself educational science kits that provide useful knowledge on simple physics concepts. Learn about the physical nature of bubbles, rotary motion, energy conversion, electric circuits and

Box size: 140(L) x 140(W) x 70(H)mm

• Recommended for ages 8+

BUBBLE BLOWING EDUCATIONAL SCIENCE KIT

Hollow spheres of iridescence! Bubbles amaze all ages as they majestically drift through the air uncaring of their limited life spans. This kit will educate on the physical characteristics of bubbles such as their micron thick surfaces, colour changing properties etc. Science aside, bubbles truly are a wonder of the physical world.

2 x AA batteries required
Assembly time: 30 mins
Cat. KJ-8942

FLYING DISC EDUCATIONAL SCIENCE KIT

Demonstrates the physical concept of rotary motion and how it can be used to lift an object into the air On a larger scale in the real world, this concept enables helicopter flight. In this kit a small plastic disc resembling the blade of a helicopter will become airborne once enough rotary speed is applied to it

• 2 x AA batteries required Assembly time: 15 mins Cat. KJ-8944

EDUCATIONAL SCIENCE KIT

ELECTRONIC CIRCUIT MAZE CHALLENGE

Some basic electronic principles demonstrated in a fun way. Assemble the kit and try to guide the metal hook around the wire maze. If the hook touches the wire it will cause electric current to flow, thus triggering a bell to ring.

· 2 x AA batteries required

Assembly time: 15 mins Cat. KJ-8946

AIM & SHOOT EDUCATIONAL SCIENCE KIT

Learn about energy conversion with this fun little kit. It's a basketball backboard plus hoop with a little launcher to shoot the basketball into the hoop. The motors rotational energy is converted to left/right energy so the basketball hoop sways back and forth. Launch the little ball and see if you can get it in the hoop.

1 x AA battery requiredAssembly time: 15 mins Cat. KJ-8948

AMAZING SOCCER FEVER EDUCATIONAL SCIENCE KIT

An infinite number of variables can affect the outcome of a soccer game. Feet must make perfect contact with the ball at the right velocity and angle to score goals. Wind resistance can affect the flight of the ball, friction with the ground, etc. This kit consists of a goal keeper which guards the goal and a little plastic foot to kick the ball. See if you can make it past the keeper!

• 1 x AA battery required • Assembly time: 15 mins Cat. KJ-8949

	7	Cat.	Qty 1+	Qty 3+	Qty 6+	
	Bubble Blowing	KJ-8942	\$9.95	\$8.75	\$7.75	
	Flying Disc	KJ-8944	\$9.95	\$8.75	\$7.75	
	Maze Challenge	KJ-8946	\$9.95	\$8.75	\$7.75	
	Aim & Shoot	KJ-8948	\$9.95	\$8.75	\$7.75	
	Soccer Fever	KJ-8949	\$9.95	\$8.75	\$7.75	









Microscopes & Anatomy Models

A BIT OF FUN

Automated Electronic Bugs

Keep your kids entertained for hours with these small robotic creatures that fit into the palm of their hands! These autonomous, high speed creatures mimic the behavior of an insect. They will run and scurry around on an even floor, table and flat surface. They have the ability to change direction if they hit an obstruction or wall and can also flip upright if they end up on their back. The vibrating motor inside this creature rotates a counterweight and propels the robotic creature forward. A fun and safe way to entertain

the kids for hours. They are the perfect collectible robot pet for vour kids. Collect them all!

- Assorted Colours
- Batteries included
- Dimensions:
- 45(L) x 17(W)mm
 Suitable for ages 5+



7	Cat.	Qty 1+	Qty 3+	Qty 6+
Sold Each	YG-2891	\$4.95	\$4.45	\$3.90

MICROSCOPES

Power Microscope Kit

With reflecting and transmission light, this power microscope will enable you to see the closest details under a monocular eyepiece or projection screen. Easy to assemble and comes with a ready made specimen for immediate exploration of the microscopic world. Requires 2 x AA batteries

• Suitable for ages: 8+

Kit Includes:

- Interchangeable multi-power revolving objective lens
- 2X Optical zoom eyepiece
 Power 50X-100X, 150X-300X, 300X-600X microscope
 Projective screen housing
- Prepared Specimen Slide & Black Specimen Slides
 Specimen Slide Cover
- Tweezers & Accessory box
- · Lifetime LED bulb
- Dimensions: 95(L) x 163(H) x 75(W)mm



Digital Mobile Microscope

This portable pocket-sized microscope is surprisingly powerful with a magnification range of 24x - 90x. It uses 3 bright-white LEDs to light up objects and features an adjustable focus to sharpen images. You can also use image filters in real time and

adjustable focus to sharpen images. You can also use image inters in real time and invert the colour, emboss the image or use greyscale. Great for official inspections, scientific education, dermatology, automotive refinishing, forensics, printing, printed circuit board and integrated circuit analysis, jewellers, kit assembly and much more. It's powered by 3 Ni-MH rechargeable AAA batteries (included) which are easily recharged through your computers USB port or the mains power

· Adjustable light intensity & LCD brightness

Lanyard include



•	SALL SALL SALL SALL SALL SALL SALL SALL
Specifications	
Screen	1.8" 65,000 colour TFT LCD
Camera Resolution	640 x 480 pixels
Batteries	Ni-MH rechargeable (included)
Dimensions	120(L) x 55(W)mm

Dimensions	120(L) x 55(W)mm		
7		Cat.	Qty 1+
Digital Mak	ila Misussana	00.3345	400.00



Electronic Bug Maze

A fantastic electronic bug habitat set. Comes complete with all the pieces required to build a beautiful home for the two electronic bugs supplied in the kit. Get your creative juices flowing and build amazing habitat structures; possibilities are endless. Pieces are easily connected in place.

Prepare to be enthralled for hours watching these little creatures scurry about in their habitat like real life bugs. You can also incorporate two mazes together to build an



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	YG-2893	\$29.95	\$26.90	\$23.70

3D HUMAN ANATOMY MODELS

1:1 Scale Human Heart Model

Deluxe cutaway life-size heart anatomy model that's perfect for medical educational purposes. Includes detachable tricuspid valve and mitral valve as well as detailed parts of the aorta, pulmonary artery, superior vena cave, inferior vena cave and septum.

- Display stand included185mm high approx
- Suitable for ages 8+





\$29.95

Female Reproductive System Model

Female reproductive system model for education and medical study. Includes detachable organs with cross section parts and internal details.

- 16 parts with stand and assembly guide
- 160mm high
- Suitable for ages 12+









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GG-2388	\$9.95

Male Reproductive System Model

Male reproductive & urinary system model for education and medical study. Includes detachable organs with cross section parts and internal details. Suitable for education in schools, universities and medical practices

- 22 parts with stand and assembly guide
- 246mm high
- Suitable for ages 12+









GG-2387

USB Digital Microscope

Capture higher resolution images and video then display them on your PC using a simple USB connection. The microscope provides its own illumination via LEDs so you just connect it to your computer, download the software and view objects on your PC up to 400x. The bright LED white light allows you to see the objects even clearer!

Specifications

- Image sensor: 1.3 megapixels CMOS, interpolated to 2 megapixels Capture Resolution: 1600×1200 , 1280×960 , 1024×768 ,
- 800 x 600, 640 x 480, 352 x 288, 320 x 240, 160 x 120
- Colour: 24-bit RGB Focus range: Manual focus from 10mm to infinite
- Flicker frequency: 50Hz/60Hz
 Frame rate: Max30f/s under 600 Lux brightness
- Magnification ratio: 20x 400x Shutter speed: 1 sec to 1/1000 sec Video format: AVI format
- Still image format: IPG and RMF

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	QC-3247	\$99.00	\$88.95	\$78.95













STILL NO.1 FOR KITS

Even today, still Number 1 for Kits!

In a world filled with outrageous claims, what could be more rational than the relaxing pastime of building a kit of parts which ends up as some useful device? After all, if it doesn't work, it must be your fault! The laws of physics DEMAND that it will work if all parts are functional and soldered in the right place. (This fact is a confronting solace when you are at your wits end!).

There is great joy and satisfaction in building a kit. Why not revisit this soon?

EXPLANATION OF KIT ICONS



SIMPLE - These kits are straightforward to assemble, generally built in one session and will require some basic electronics knowledge and soldering skills. Most are battery or AC adaptor powered. They may not have enclosures (i.e."boxes") or front panels.



DETAILED - Similar to the above but basically bigger. They are either "short forms" of larger projects or are fully operational projects with enclosures, front panels, etc. A greater knowledge of electronics is required to understand their operation and "troubleshoot" if necessary.



COMPLEX - All big projects which by their nature are complex, require several sittings to complete and may require some mechanical assembly. A good knowledge of electronics and manual dexterity is necessary to ensure success.



















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240V POWERED - All mains kits have this logo. We do this because we feel it is necessary that only experienced kit constructors should attempt mains powered projects. It is generally a good idea to have a competent colleague check your work before applying power.

AUTOMOTIVE KIT - Kit is specifically designed for automotive (which could mean motorcycle, caravan or boat as well).

BUILD TIME - We understand that your time is valuable. We have therefore decided to provide you with an estimated build time for all our kits. Each kit includes a stopwatch logo that clearly indicates construction time. We know that you will find this useful.

KWIK KIT - A low cost fast assembly range of kits. Kwik kits are a fully imported range that can be assembled in just one sitting, sometimes only minutes! All printed circuit boards are screened with a component overlay. The instructions assume component knowledge & the ability to follow simple schematic diagrams.

SMD COMPONENT - Kit involves soldering a SMD (Surface Mount Device). Suitable soldering iron for SMD soldering and proper handling techniques are required.

SMD COMPONENT - PRE SOLDERED - Kit supplied with surface mount component already soldered onto the PCB

CAN'T FIND THE KIT YOU'RE LOOKING FOR? - SEE OUR KIT BACK CATALOGUE ON PAGE 38



If you can't find what you're looking for, try the Jaycar Kit Back Catalogue. To keep up with the constant flow of new kits an to date in-store line-up of projects, older and slow moving kits are returned to our central warehouse. We have again included in this

catalogue a number of the Kits that form our Back Catalogue. The range is divided up into sections and are located on page 38. In this listing is included a brief description, the reference magazine and issue date of the article, a catalogue reference number and a unit price.

Back catalogue kits are not normally available in Jaycar Stores; you can ONLY access information about them on our website.



On our website each of these Kits has a full description and, where available, a link to the original article for this Kit. This will allow you to read and understand how the kit operates and to maximise the functionality of these Kits.

Freecall order hotline: 1800 022 888

GUARANTEE ON KITS

Most kits are successfully constructed with few problems. However, we recommend that if a kit builder does not have enough knowledge to diagnose faults, that the project should not be started unless assistance can be obtained. Unfortunately, one small faulty solder joint or wiring mistake can prevent a project from operating, which would take hours to locate and at normal service rates the service charge could well be more than the total cost of the kit. If you believe that you may have difficulty in

friend, we suggest you return the kit to us in its original condition for a refund under satisfaction guarantee once construction has been commenced. However, should you find any faulty parts (only), we will gladly replace them under warranty.

Kits - Audio Projects

AV KITS - AUDIO INDEX Audio/Video Kits - Audio KG-9032 1W Audio Amplifier KC-5454 KC-5150 KC-5178 KV-3540 45 Second Voice Recorder 50WRMS Mono Amplifier Module Clifford the Cricket 29 Crystal Radio KC-5491 KC-5506 DÁB+ Hi Fi Receive 28 28 Digital Audio Delay Kit NEW Digital to Analogue KC-5172 Fog Horn Miniature FM Transmitter KG-9092 20 KE-4711 KC-5507 Stereo Compressor Kit NEW 28 Super Ear KA-1809 The Champ 0.5W Amplifier KC-5152 The Champ Preamp Theremin Mk II KC-5166 KC-5475 Universal Stereo Preamp KC-5159 27

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Programable Smartcard	KC-5361	29, 33, 61	

PREAMPLIFIER KITS

"Pre-Champ" Versatile Preamplifier

Refer: Silicon Chip Magazine July 1994 This tiny preamp was specifically designed to be used with the 'Champ' amplifier KC-5152. Unless you have a signal of sufficient amplitude the 'Champ' will not produce its maximum power output. The 'Pre-Champ' is the answer with a gain in excess of 40dB, which is more than enough for most applications. You can vary the gain by changing a resistor and there is even provision on the PCB for an electret microphone. Use AM-4010.



- Kit includes PCB and electronic components.
- Can be battery powered.
- PCB: 46 x 36mm

71	Cat.	Qty 1+	Qty 5+
	KC-5166	\$8.95	\$7.95
ELECTRET MICROPHONE TO SUIT	AM-4010	\$2.35 ea	
RECOMMENDED BOX - UB5	HB-6015	\$2.95 ea	

Universal Stereo Preamplifier

Refer: Silicon Chip Magazine April 1994 Perfect for phono, tape or microphones.

Based around the low noise LM833 dual op-amp IC, this preamp is designed for use with a magnetic cartridge, cassette deck or dynamic microphone. The performance of this design is far better

than most preamps in many stereo amplifiers, making it a worthy replacement if your current preamp falls short of expectation. It features RIAA/IEC equalisation, and is supplied with all components to build either the phono, tape or microphone version. Measuring only 80 x 78 x 30mm, it is ideal for incorporating into existing equipment

- · PCB and components
- +/- 15VDC
- Use Cat MM-2007 if power is not available in your equipment.
- PCB: 80 x 78mm.

7	Cat.	Qty 1+	Qty 5+	
	KC-5159	\$16.95	\$14.95	
TRANSFORMER TO SUIT	MM-2007	\$8.95 ea		
RECOMMENDED BOX - LIB1	HR-6011	\$4.45 ea		

AMPLIFIER KITS

"The Champ" Audio Amplifier

Refer: Silicon Chip Magazine February 1994 This tiny module uses the LM386 audio IC, and will deliver 0.5W into 8 ohms from a 9 volt supply making it ideal for all those basic audio projects. It features variable gain, will happily run from 4-12VDC and is smaller than a 9 volt battery, allowing it to fit into the tightest of spaces.



PCB: 46 x 26mm



1 Watt Audio Amplifier Module

This tiny PCB measuring only 28 x 28mm incorporates all the electronics for a 1 Watt amplifier. 4 to 12VDC operating voltage, 50mV input sensitivity, 8 ohm output and 20 to 25000Hz output frequency. Optional connection for a 10k ohm - 100k ohm logarithmic potentiometer (not included) for adjustable

- PCB and components.
- 9VDC (use MP-3146)
 PCB: 41 x 24mm

7	Cat.	Qty 1+	Qty 5+
	KG-9032	\$9.95	\$8.75
9VDC PLUGPACK TO SUIT	MP-3146	\$17.95 ea	

50 Watt Amplifier Module

Refer: Silicon Chip Magazine March 1994

This 50 watt unit uses a single chip module and provides 50 watts RMS into 8 ohms with very low distortion and extreme quietness. PC Board size only 84 x 58mm.

- Output power: 50WRMS continuous into 8
- Power supply: +/- 37.5VDC
 Signal/Noise ratio: -114dB (A-weighted)
- 106dB (20-20kHz)
- Distortion: 0.002% at 40W 1kHz
 IHF power output: 60W @ 1kHz
- Power Requirements:
- +/-35VDC rails @ 80VA per module
- MT-2114 25 + 25V 160VA toroid x 1
 ZR-1314 Bridge rectifier x 1
- RE-6241 2,200/50V electro caps x 2
- Kit is supplied in short form version.
 PC Board and electronic components supplied. Use heatsink HH-8590.
- PCB: 84 x 58mm

7	Cat.	Qty 1+	Qty 5+
	KC-5150	\$29.95	\$26.90
HEATSINK TO SUIT	HH-8590	\$19.95 ea	

AUDIO KITS

The Super Ear

Refer: Electronics Australia May 1998

This kit assists people who have difficulty in hearing high audio frequencies, or for those who want to hear more than their normal unaided ear. By amplifying these high audio frequencies, not only will conversations be made clearer, you will be able to hear noises not normally heard such as insects or a watch ticking, for example. Built into a small case and powered from a 9V battery makes this kit totally portable. Use it as a hearing aid or for a fun & educational purpose

- Kit supplied with case, fFront label, PCB, 9V battery, and all electronic components.
 Headphones required.
- · Note: Not a replacement for a proper hearing aid.

7	Cat.	Qty 1+	Qty 5+	
	KA-1809	\$27.95	\$24.95	





AUDIO KITS (CONTINUED)

DAB+/FM Digital Radio

Refer: Silicon Chip Magazine June, July, August 2010







This is a world first. This is (as far as we know) the very first D.I.Y. Construction project for a DAB+ tuner. And it's a big one too! There are many small DAB+ "mantel" type radios available, but very few -almost none- full Hi Fi style component units. Jaycar has worked with Silicon Chip and a company in the UK called "Frontier Silicon" to develop and design a world class truly Hi Fi DAB+ tuner which utilizes all of the potential of DAB+. Nothing has been sacrificed for performance. The project will be described in full over 2-3 months in Silicon Chip magazine and is exclusive to Jaycar.

The heart of this project is the microprocessor-style chip set called "Venice-7". This set can be configured in a number of ways, but, suffice to say we have extracted the maximum Hi Fi performance out of it.

The kit comprises of a Hi Fi component size (430mm) metal cabinet, all electronics, special PCB, power supply, LCD front panel information display and special remote control. It will also give a very high quality FM output as well. A tuner of similar performance - if you could find one - would cost around \$700.

- Digital station information display
- Station memory reset
- · RCA & optical audio output
- External antenna connection
- IR remote control
- Main board PCB: 194 x 115mm
- Display & Control PCB: 277 x 57mm

IAYCAR OUALITY **EXCLUSIVE TO JAYCAR**

NOT AVAILABLE IN NZ

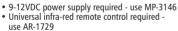


7	Cat.	Qty 1+	Qty 5+
	KC-5491	\$399.00	\$359.00

Digital Audio Delay

Refer: Silicon Chip Magazine December 2011

Corrects sound and picture synchronisation ("lip sync") between your modern TV and home theatre system. Features an adjustable delay from 20 to 1500ms in 10ms steps, and handles Dolby Digital AC3, DTS and linear PCM audio with sampling rate of up to 48kHz. Connections include digital S/PDIF and optical Toslink connections, and digital processing means there is no audio degradation. Kit includes PCB with overlay, enclosure with machined panels, and electronic components.



• PCB: 103 x 118mm

Note: We supply the surface mounted IC already

pic	solucica to save you time and ma.	diation			
7		Cat.	Qty 1+	Qty 5+	
		KC-5506	\$99.95	\$89.95	
	9VDC Plugpack to suit	MP-3146	\$17.95		
7		Cat.	Qty 1+	Qty 4+	
	IR Remote Control	ΔR-1729	\$24.95	\$22.35	

Stereo Compressor

Refer: Silicon Chip Magazine January 2012 Compressors are useful in eliminating the extreme sound levels during TV ads, "pops" from microphones when people speak or bump / drop them, levelling signals when singers or guitarist vary their level, etc. Kit includes PCB, processed case and electronic components for 12VDC operation. 12VDC plug pack required -use MP-3147.

PCB: 118 x 102mm



Freecall order hotline: 1800 022 888

7	Cat.	Qty 1+	Qty 5+	
	KC-5507	\$59.95	\$53.95	
12VDC Plugpack to suit	MP-3147	\$17.95		

"Minivox" Voice Operated Relay

Refer: Silicon Chip Magazine September 1994

Voice operated relays are often used in 'hands free' communication such as mobile radios, amateur transceivers as well as some PA applications. The idea, of course is that instead of pushing a button on the microphone to talk, the sound of the voice activates it instead.

This tiny kit measures approx 50 x 50 x 15mm and is designed to fit into the tightest spaces, has almost no turn-on delay, and has 3 second release time.

- 12VDC @ 35mA required.
- Kit is supplied with PCB electret mic, and all specified components.
 PCB: 47 x 44mm

1 CD. 17 X 1 1111111				
7	Cat.	Qty 1+	Qty 5+	
	KC-5172	\$15.95	\$14.35	
RECOMMENDED BOX - UB5	HB-6015	\$2.95 ea		

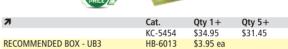
45 Second Voice Recorder Module

Refer: Silicon Chip Magazine December 2007

Here's an improved version of the very popular voice recorder design published by Silicon Chip Magazine in May 2005. This improved version can now be set up easily to record two, four or eight different messages for random-access playback or a single message for etape mode' playback. Also, it now



PCR⁻ 120 x 58mm



AV KITS - RADIO & FM KITS

Crystal Radio

A radio without batteries!

Enjoy AM broadcasting without using battery or other power sources. Ideal for entry-level students or hobbyist with little electronics experience.

- Includes circuit explanation.
- Kit supplied with screen printed PCB (81x53mm), crystal, pre-wound coil, earphone and all components.
- PCB: 80 x 50mm



Miniature FM Transmitter

Refer: Electronics Today International December 1985

This unit is a two transistor two stage transmitter that has the benefits of being VERY COMPACT. The kit contains PCB, 9V battery and all components, and makes an ideal inexper beginners kit.

• PCB: 45 x 23mm

7	Cat.	Qty 1+	Qty 5+	
	KE-4711	\$12.95	\$11.35	
RECOMMENDED BOX - UB5	HB-6015	\$2.95 ea		

Kit Constructors Manual

A must for amateur constructors. Contains much useful information for the more experienced. Huge amounts of information on construction and identification of parts.

• 8 pages.



BOCK	AUSTRALIA

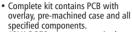


AUDIO EFFECTS KITS

Theremin Synthesiser MkII

Refer: Silicon Chip Magazine March 2009

The ever-popular Theremin is better than ever. It's easier to set up with extra test points for volume adjustment and power supply measurement and it now runs on AC to avoid the interference switchmode plugpacks can cause. It's also easier to build with PCB-mounted switches and pots to reduce wiring to just the hand plate, speaker and antenna and has the addition of a skew control to vary the audio tone from distorted to clean



12VAC 250mA power required.

PCB size: 85 x 145mm



CREATE YOUR OWN WEIRD SCIENCE FICTION SOUNDS WITH THIS MODERN IMPLEMENTATION OF AN OLD IDEA

As used in the Beach Boys classic hit "Good Vibrations Create your own weird science fiction sounds with this modern implementation of an old idea. The Theremin synthesiser produces those familiar science fiction movie sound effects when you move your hand between a metal plate and antenna. The unit has an amazing range from piecing shrieks to low end growling sounds. The Theremin, named after its inventor Leon Theremin, is a musical instrument that uses electronic circuits to produce audible sounds, having the unusual aspect of being controlled by the player's hand movements near the two "antennas", without touching the instrument.

HOW DOES IT WORK?

As the player moves his hands, the value of capacitance between his hand and the theremin's antennas vary, changing current in the circuit, which in turn controls the sound signal that goes to the amplifier and speaker. One hand is use to control the Theremin's pitch, and the other is used to control the volume.

7		Cat.	Qty 1+	Qty 5+	
		KC-5475	\$74.95	\$67.50	
	12VAC PLUGPACK TO SUIT	MP-3020	\$18.95		

Fog Horn

This kit generates a deep sounding noise similar to fog horns on ships. Use as a unique warning siren or to improve a child's toy

- Output power up to 5 watts depending on the input voltage used.
 • 4.5-12VDC
- Requires an 8ohm speaker use our AS-3000
- PCB: 25 x 25mm.



7	Cat.	Qty 1+	Qty 5+
	KG-9092	\$12.95	\$11.35
57mm SPEAKER TO SUIT	AS-3000	\$3.50 ea	
RECOMMENDED BOX UB3	HB-6013	\$3.95 ea	

Clifford The Cricket

Refer: Silicon Chip Magazine Dec 1994 Clifford hides in the dark and chirps annoyingly until a light is turned on - just like a real cricket. Clifford is created on a small PCB and has little LED insect eyes that flash as it sings.

Just like a real cricket, it waits a few seconds after darkness until it begins chirping, and stops instantly when a light comes back on.



- PCB, piezo buzzer, LDR plus all electronic components supplied.
 • PCB: 41 x 36mm

7	Cat.	Qty 1+	Qty 5+	
	KC-5178	\$16.95	\$14.95	



DID YOU KNOW...

Nicholas Copernicus (1473 - 1543)

He theorised that the Sun was the fixed point around which the motions of the planets takes place. The Earth rotates around its axis once in a day and slow alterations in the direction of this axis cause the precession of the equinoxes.

AV KITS - VIDEO

IR Remote Extender MKII

Refer: Silicon Chip Magazine October 2006Operate your DVD player or digital decoder using its remote control from another room. It picks up the signal from the remote control and sends it via a 2wire cable to an infrared LED located close to the device. This improved model features fast data transfer, capable of transmitting Foxtel digital remote control signals using the Pace 400 series decoder. Kit supplied with case, screen printed front panel, PCB with overlay and all electronic components

Required: 9VDC and 2-wire cable for extending the IR-Tx lead (use WB-1702). PCB: 79 x 47mm

Cat.	Qty 1+	Qty 5+
KC-5432	\$26.95	\$23.95
MP-3146	\$17.95 ea	
WB-1702	\$0.50 per m	etre
	KC-5432 MP-3146	KC-5432 \$26.95 MP-3146 \$17.95 ea

Smart Card Programmer for Gold, Silver and Emerald Wafer Cards

Refer: Silicon Chip Magazine July 2003 This full function programmer allows you to program both the microcontroller and EEPROM in the popular Gold. Silver and Emerald wafer cards. It hooks up to the serial port of your PC and can be operated as a free-standing unit or installed in a PC drive bay Cards used need to conform to ISO-7816 standards,

- Instructions outline requirements for software that are available on the Internet. PCB, wafer card
- socket and electronic components 9-12VDC (battery or use MP-3146)
 PCB: 141 x 101mm

which includes ones sold by Jaycar.

Jaycar Flectronics and Silicon Chin Magazine will not accept responsibility for the operation of this device, its related software, or its potential to be used for unlawful purposes.

For suitable Wafer Card see page 61

71	Cat.	Qty 1+	Qty 5+
	KC-5361	\$54.95	\$49.45
REGULATED PLUGPACK TO SUIT	MP-3146	\$17.95 ea	





LED Headband Magnifier

A handy tool for kit construction. This magnifying headset leaves both hands free and can be worn over prescription or safety glasses. It also has a built-in LED light that can be rotated up, down or side to side to illuminate your work. There are three lenses that can be used in combinations to give 1.5x 3x, 8.5x or 10x magnification. The head strap is fully adjustable and locks into position and the lens assembly can be swivelled up out of the way when not in use. A multitude IT TILTS UP of uses including lapidary, jewellery, model-making

electronics and camera repair · Requires 2 x AAA batteries

Cat. OM-3511



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Car Battery Monitor

Refer: Electronics Australia May 1987 Don't get caught with a flat battery! This simple electronic voltmeter lets you monitor the condition of your car's battery so you can act before getting stranded. 10 rectangular LEDs tell you your battery's condition.

• Kit includes PC board and all

components.
• PCB: 62 x 39mm



7	Cat.	Qty 1+	Qty 5+	
	KA-1683	\$17.95	\$15.95	
RECOMMENDED BOX - UB5	HB-6015	\$2.95 ea		

Voltage Monitor

Refer: Silicon Chip

Magazine May 2006
This versatile kit will allow you to monitor the Inis versatile kit will allow you to monitor the battery voltage, the airflow meter or oxygen sensor in your car. The kit features 10 LEDs that illuminate in response to the measured voltage, preset 9-16V, 0.-5V or 0-1V ranges, complete with a fast response time, high input impedance and auto dimming for night time driving. Kit includes PCB with overlay, LED bar graph and all electronic components.

- 12VDC
- Recommended box: UB5 use HB6015
- PCB: 74 x 47mm

7	Cat.	Qty 1+	Qty 5+
	KC-5424	\$22.95	\$20.35
RECOMMENDED BOX - UB5	HB-6015	\$2.95 ea	

Mixture Display For Fuel Injected Cars

Refer: Silicon Chip Magazine November 1995

This very simple kit will allow you to monitor the fuel mixtures being run by your car. This type of sensor is also known as an E.G.O. (exhaust, gas, oxygen) monitor. You can use it as a tuning tool, to help in vehicle modification or simply to see the behaviour of the engine control module. Indication is via 10 LEDs to show mixtures rich, lean and normal. The circuit connects

to the EGO sensor mounted in the exhaust manifold and the cars battery.

- PCB_LEDs and components supplied. Thousands sold!
- PCB: 74 x 36mm

7	Cat.	Qty 1+	Qty 5+
	KC-5195	\$16.95	\$14.95
RECOMMENDED BOX - UB5	HB-6015	\$2.95 ea	

Freecall order hotline: 1800 022 888

G-Force Meter

Measure the g-forces on your vehicle and it's occupants during your next lap around the race circuit, or more sensibly use this kit to encourage smoother driving to save petrol and reduce wear & tear. Based around an accelerometer IC, this kit displays the forces (+/- 2g) on the 4-digit LED display. It is not limited to cars either; use it to measure g-forces on a boat crashing over waves or on a theme park thrill ride. Kit includes PCB with premounted SMD component, pre-programmed microcontroller and all onboard electronic components.

Note: To make the kit more accessible to everyday hobbyists we are suppling the PCB with the SMD component already mounted on the board to save time and frustration.

Requires 2 x AA batteries PCB: 100(L) x 44(W)mm

Cat. KC-5504

Courtesy Interior Light Delay

Refer: Silicon Chip Magazine June 2004

Many modern cars feature a time delay on the interior light. It still allows you time to buckle up and get organised before the light dims and finally goes out. This kit provides that feature for cars which don't already provide it. It has a soft fade out after a set time has elapsed, and features much simpler universal wiring than previous models we have had.

- · Kit supplied with PCB with overlay,
- and all electronic components.
 Suitable for circuits switching ground or +12V or 24VDC (car & truck with negative chassis.)

 • PCB: 78 x 46mm

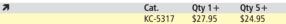
7	Cat.	Qty 1+	Qty 5+
	KC-5392	\$19.95	\$17.70
RECOMMENDED BOX - UB5	HB-6015	\$2.95 ea	

Headlight Reminder For Cars

Refer: Silicon Chip Magazine August 2001

Nothing is more frustrating than getting into your car early in the morning, only to discover that you had left your headlights on the night before, running your car's battery flat. Features include a modulated alarm, ignition and lights monitoring, optional door switch detection, time-out alarm and a short delay before the alarm sounds. Build and install this hasslesaving kit and enjoy a feature in your car that many luxury vehicle owners have long taken for granted. Kit includes quality solder masked PCB with overlay, case with screen printed lid and all electronic components, 12VDC

• PCR: 78 x 49 mm



Ultrasonic Proximity Detector

Attention motorists!

JAYCAR OUALITY

THOUSANDS

SOLD!

Commercial products that carry out a similar task are, in some cases, worth over \$100. Choose the minimum distance you wish to maintain between your vehicle and objects nearby. Useful at a distance of 10 to 80cm, the kit can also be used to sense animals straying into a particular area or even specific object security protection such as TVs and VCRs. An LED illuminates once an object strays into the detector's sensor

- · Kit includes Kwik Kit PCB, one pair of ultrasonic sensors plus electronic components. This kit is designed to be used in a garage, not under the bumper bar.
- Sensors not waterproof.
- Suitable waterproof transducers/sensors Cat AU-5550.
- PCB: 55 x 43mm.

71	Cat.	Qty 1+	Qty 5+	
	KG-9158	\$29.95	\$26.90	
RECOMMENDED BOX - UB5	HB-6015	\$2.95 ea		























Kits - Automotive Projects

10A 12VDC Motor **Speed Controller**

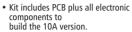




Refer: Silicon Chip Magazine June, 1997

Use this kit for controlling 12V DC motors in cars such as fuel injection pumps, water/air intercoolers and water injection on performance cars. You can also use it for headlight dimming and for running 12V DC motors in 24V vehicles. The circuit incorporates a soft start feature, which is used to reduce

inrush currents, particularly if the kit is to control 12V incandescent lamps. As presented, the kit will control loads up to 10 amps, although the addition of an extra MOSFET transistor will double that capacity to an amazing 20 amps.



· Extra MOSFET available separately, ZT2450.

PCB: 69 x 51mm

71	Cat.	Qty 1+	Qty 5+
	KC-5225	\$24.95	\$22.35
OPTIONAL MOSFET TO SUIT	ZT-2450	\$8.95 ea	
RECOMMENDED BOX - UB3	HB-6013	\$3.95 ea	

Speedo Corrector MkII

Refer: Silicon Chip Magazine December 2006

When you modify your gearbox, diff ratio or change to a large when you mount your geanox, din ratio of change to a large circumference tyre, it may result in an inaccurate speedometer. This kit alters the speedometer signal up or down from 0% to 99% of the original signal. With this improved model, the input setup selection can be automatically selected and

setup selection can be automatically set it also features an LED indicator to show when the input signal is being received. Kit supplied with PCB with overlay and all electronic components.



PCB: 105 x 61mm

7	Cat.	Qty 1+	Qty 5+	
	KC-5435	\$54.95	\$49.45	
RECOMMENDED BOX - UB3	HB-6013	\$3.95 ea		

High Range Adjustable Temperature Switch with LCD

Refer: Performance Electronics for Cars - Silicon Chip **Magazine Publications**

- · Measures to an incredible
- 1200 degrees Celsius Switch devices on or off at a set temperature
- Digital readout

- Display any car temperature: oil, exhaust gas, coolant, intake air, brakes, etc
- Trigger alarms, warning lights, fans, etc, at a selectable temperature

Refer: Performance Electronics for Cars - Silicon Chip Publications
Heat can be a major problem with any car, especially modified and performance cars.
the more power, the more heat, so you need to ensure you have adequate cooling systems in place. This temperature switch can be set anywhere up to 1200 degrees Celsius, so it is extremely versatile. The relay can be used to trigger an extra thermo fan on an intercooler, mount a sensor near your turbo manifold and trigger water spray cooling, or a simple buzzer or light to warn you of a high temperature. The LCD, which can easily be dash mounted, displays the

temperature all the time. kit supplied with a quality solder masked PCB with overlay, LCD panel, temperature probe and all electronic components. Probe does NOT have isolated case. Kit requires probe with insulated case, if mounted to common ground.

• PCB: 105 x 60mm

7	Cat.	Qty 1+	Qty 5+
	KC-5376	\$72.95	\$65.50
RECOMMENDED BOX - UB3	HB-6013	\$3.95 ea	

Universal Voltage Switch

Refer: High Performance

Reference Telephornamer Electronic Projects for Cars - Silicon Chip Magazine Publications. This is a universal module which can be adapted to suit a range of different

applications. It will trip a relay when a preset voltage is reached. It can be configured to trip with a rising or falling voltage, so it is suitable for a wide variety of voltage outputting devices eg., throttle position sensor, air flow sensor, EGO sensor. It also

trigger on/off voltage), making it extremely versatile. You could use it to trigger an extra fuel pump under high boost, anti-lag wastegate shutoff, and much more. Kit supplied with PCB, and all electronic components.



	· ·			
7	Cat.	Qty 1+	Qty 5+	
	KC-5377	\$32.95	\$29.45	
RECOMMENDED BOX - UB3	HB-6013	\$3.95 ea		

Frequency Switch

Refer: High Performance Electronic Projects for Cars - Silicon Chip Magazine Publications.

Widgazine Publications.

This is a great module which can be adapted to suit a range of different applications. It uses a standard tacho, road speed, or many other pulse outputs to switch a relay. The switch frequency can be set to trip when it is rising or falling, and it features adjustable hysteresis (the difference between trigger on/off frequency). You could configure it to

rigger water spray cooling on deceleration, shift light activation, adjustable aerodynamics based on speed, intake manifold switching and much more. Kit supplied with PCB, and all electronic components.

PCB: 105 x 60mm

71	Cat.	Qty 1+	Qty 5+	
	KC-5378	\$37.95	\$33.95	
RECOMMENDED BOX - UB3	HB-6013	\$3.95 ea		

High Range Adjustable Temperature Switch with LCD

Refer: Performance Electronics for Cars - Silicon Chip

Magazine Publications

- · Measures to an incredible 1200 degrees Celsius
- Switch devices on or off at a set temperature
- Digital readout

- Display any car temperature: oil, exhaust gas, coolant, intake air, brakes, etc
 Trigger alarms, warning lights, fans, etc, at a selectable temperature.

Refer: Performance Electronics for Cars - Silicon Chip Publications Heat can be a major problem with any car, especially modified and performance cars. the more power, the more heat, so you need to ensure you have adequate cooling systems in place. This temperature switch can be set anywhere up to 1200 degrees Celsius, so it is extremely versatile. The relay can be used to trigger an extra thermo fan

on an intercooler, mount a sensor near your turbo manifold and trigger water spray cooling, or a simple buzzer or light to warn you of a high temperature. The LCD, which can easily be dash mounted, displays the temperature all the time. kit supplied with a quality solder masked PCB with overlay, LCD panel, temperature probe and all electronic components. Probe does NOT have isolated case. Kit requires probe with insulated case, if mounted to common around

• PCB: 105 x 60mm

7	Cat.	Qty 1+	Qty 5+
	KC-5381	\$32.95	\$29.45
RECOMMENDED BOX - UB3	HB-6013	\$3.95 ea	

Capacitor Discharge Ignition for Motor Bikes

Refer: Silicon Chip Magazine May 2008 Many small petrol engines fitted to

modern motor bikes use a capacitor discharge ignition (CDI) to improve performance and enhance reliability. The only downside of this is that if the CDI ignition module fails, a replacement can be very expensive. This kit will replace many failed factory units and is designed for engines with separate generator & trigger coils and which generate a positive high voltage to charge the capacitor

before firing. Most CDI ignitions operate this way, but there are variations. Luckily, this CDI module uses cheap and readily available parts and is worth a try before shelling out lots of hard-earned cash for a genuine replacement module. Supplied with solder masked PCB and overlay, case and components. Some mounting hardware required.

• PCR: 45 x 64mm

1 CD1 15 X C 111111				
7	Cat.	Qty 1+	Qty 5+	
	KC-5466	\$21.95	\$19.70	



Programmable High Energy Ignition



Refer: Silicon Chip Magazine March/April 2007

This is Silicon Chip's most advanced and versatile ignition system yet and can be used on both two & four stroke engines. The system can be used simply to intercept and modify the factory ignition timing or turned into a stand alone ignition system with remapped timing, electronic coil control and anti-knock sensing. The unit will trigger

from a range of sources including points, Hall effect sensors, optical sensors, or the 5 volt signal from the car's ECU. Timing can be mapped against engine load and RPM and adjusted in step as small as 0.5°.

- Timing retard & advance over a wide range
- Suitable for single coil systems
 Dwell adjustment
- Single or dual mapping ranges
- Two de-bounce settings Max & min RPM adjustment
- Suits 1 to 12 cylinder four stroke engines and 1 to 6 cylinder two stroke engines
- Optional knock sensing available
- Kit includes PCB with overlay, programmed micro, all electronic components and die cast box.
- PCB: 102 x 81mm

*Optional knock sensing kit available. Use KC-5444 Kit Back Catalogue



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Hand Controller for Digital Adjusters

Refer: Performance Electronics for Cars - Silicon Chip Magazine **Publications**









Electronic Boost Controller circuits This hand controller is used for the mapping/programming of both Digital Adjuster kits. It features a two line LCD, and easy to use pushbuttons. It can program the adjusters then removed, or left permanently connected to display the adjuster's operation. It is designed as an interface and display, and is not required for general adjuster functions after they have been programmed. If you have built and installed multiple adjuster kits, you will only need one controller to program, unless you want permanent displays for each adjuster function.

- PCB silk screened and machined case, LCD, and all electronic components.
- Must have all D25 pins connected.
- PCB: 65 x 115mm





		Qty 5+
KC-5442	\$69.95	\$62.95

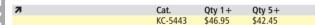
Ignition Coil Driver

Refer: Silicon Chip Magazine March, April 2007

Add this ignition coil driver to the KC-5442 Programmable Ignition System and you have a complete stand-alone ignition system that will trigger from a range of sources including points, Hall effect sensors, optical sensors, or the 5 volt signal from the car's ECU. The kit can be mounted close to the coil to minimise energy loss and the ignition system can be fitted inside the car. Kit includes PCB with overlay and all specified components.



• PCB: 102 x 81mm



7	Cat.	Qty 1+	Qty 5+	
	KC-5386	\$67.95	\$60.95	
7	Cat.	Qty 1+	Qty 4+	Qty 10+
D25 MALE TO MALE CABLE - 1.8M	WC-7502	\$13.95	\$12.35	\$10.95

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Silicon Chip is Australia's world-class magazine for Silicon Chip is Australia's world-class magazine for the electronics enthusiast. As well as a great range of fun DIY kits, SILICON CHIP has interesting features articles and popular columns such as "Serviceman's Log" and "Circuit Notebook" etc.

Jaycar gets its stock of SILICON CHIP straight off the printing press, so we usually have it a couple of days earlier than the newsagents.

Don't forget to call in to a Jaycar store for the latest issue hot off the press.





AUTOMOTIVE - MARINE KITS INDEX

Automotive - Marine	Cat. Page
Ultrasonic Antifouling for Boats	KC-5498 32

Qty 1+ BE-5025

Ultrasonic Anti-fouling for Boats

Refer: Silicon Chip Magazine September/October 2010

Many of you know that you can buy imported marine growth electronic antifouling systems that cost up to \$8000. Jaycar, with Silicon Chip have developed a similar system based on this technology and information in the public domain. This project uses the same ultrasonic waveforms and virtually identical ultrasonic transducers mounted in sturdy polyurethane housings. By building yourself (which includes some potting) you save a fortune! Standard unit consists of control electronic kit and case, ultrasonic transducer , potting and gluing components and housings. The single transducer design of this kit is suitable for boats up to 10m (32ft); boats longer than about 14m will need two transducers and drivers. Basically all parts supplied in the project kit including wiring. (Price includes epoxies).

- 12VDC
- Suitable for power or sail
- Works with aluminium and fibreglass boats (not suitable for timber, ferro cement or fibreglass) foam sandwich construction)
- Could be powered by a solar panel/wind generator
- Output frequency range: 19.08 41.66kHz in 14 bands with 200ns steps.
 Frequency sweep in each band: 12 frequencies ranging from 80Hz spacings at 20kHz to 344Hz steps at 40kHz
- Signal burst period: 600ms at 20kHz, 300ms at 40kHz (12000 cycles/ burst)
 Output drive. 250VAC

- Supply Voltage. 11.5V to 16V maximum
 Current drain: 220mA average at 12V driving a 3nF load

7	Cat.	Qty 1+	Qty 5+	
	KC-5498	\$249.00	\$225.00	







See our new assembled Ultrasonic **Antifouling Devices on page 387**

Kits - Computer Projects

COMPUTER KITS INDEX Computer Experimenter USB Interface miniMaximite Controller PC Controlled Stepping Motor PC Link for Automatic Control KC-5505 33 33 KV-3594 KV-3590 XC-4402 33 33, 61 Pic Programmer Progrmamable Smartcard KC-5361 29, 33, 61 SD Card Web Server

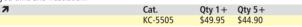
miniMaximite Controller

Refer: Silicon Chip Magazine November 2011

A versatile and intelligent controller to interface with A versatile and intelligent controller to interface with your creations, such as home automation. Features 20 configurable digital/analog inputs or output ports, 128K RAM and 256KB flash memory to hold your program and data. Design and test in MMBasic over a USB link from your PC, then disconnect the PC and the programs continue to operate. Alternatively, hard wire a PC monitor, keyboard, SD card reader and amplified speaker to work independent of a PC. Requires 2.3 - 3.6V DC (2 x AA or use plugpack MP-3310). Kit supplied with PCB, pre-programmed and pre-soldered

micro, and electronic components. PCB: 78 x 38mm

Note: We supply all of the surface mounted components already pre-soldered to save you time and frustration.

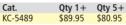


SD/MMC Card Webserver In a Box

Refer: Silicon Chip Magazine November 2009

Host your own website on a common SD/MMC card with this compact Web server In a Box (WIB). It connects to the Internet via your modem/router and features inbuilt HTTP server, FTP server, SMTP email client, dynamic DNS client, RS232 serial port along with four digital outputs and four analogue inputs. Requires a SD memory card, some SMD soldering and a 6-9VDC power adaptor. Kit includes PCB, case





PC Link for Automatic Control

Automate your house and show your friends Automate your mouse and show your ment how clever you are! By using our parallel port controller, you can switch up to eight separate devices on or off via your computer's printer port. Switch on garden lighting, turn on sprinklers or even control your household heating with this terrific kit. Each SPDT relay can handle 10 amps and has an LED indication to show whether it is



on or off. Software is provided on a 3.5 disk. Kit includes PCB, relays, software, and all electronic components. 8 - 12VDC power required - use plugpack MP-3484

PCB: 185 x 90mm

7	Cat.	Qty 1+	Qty 5+
	KV-3590	\$69.95	\$62.95
9VDC PLUGPACK TO SUIT	MP-3484	\$21.95 ea	

USB Experimenter's Interface

Interface your computer to the real world with this sophisticated USB Kit. There are five digital inputs to monitor the state of external switches or controls and



two variable gain analogue inputs that can be connected to sensors and used for measuring temperature, humidity, voltage, current, & other variable parameters. Eight digital and two analogue outputs are available for controlling external equipment. The kit is supplied with all components, silk screened PCB, assembly manual, and software.

- 5 Digital inputs
- 2 Analogue inputs with variable gainAnalogue input range 0 to 5VDC
- · 8 Open collector digital counters
- 2 Analogue outputs PWM or 0 to 5VDC
- On-board test buttons for inputs & LED
- USB nowered
- Win98SE or above (Not NT)
- PCB: 145 x 87mm

7	Cat.	Qty 1+	Qty 5+
	KV-3600	\$69.95	\$62.95
RECOMMENDED BOX - UB2	HB-6012	\$6.95 ea	

Velleman PIC Programmer / Checker Module

Supporting 8 pin, 14 pin, 18 pin, and 24 pin PIC microcontrollers, this board is guite supporting 8 pin, 14 pin, 16 pin, and 24 pin PTC introductionales, this board is quite versatile. It operates as a regular programmer, but also has on-board test functions using LEDs and pushbuttons. This makes experimenting and debugging faster and easier, reducing the need for constant chip swapping between programming and operational circuits. It includes a copy of PIC programming software, and can run on Win 95 / 98 / ME / NT / 2000 and XP. It operates through the serial interface for simplicity, and supports a huge array of microcontrollers

The list below is some, but not all of them: PIC12F629, PIC12F675, PIC16C83, PIC16CR83, PIC16F83, PIC16C84, PIC16C84, PIC16F84A, PIC16F870, PIC16F871, PIC16F872, PIC16F873, PIC16F874, PIC1 PIC16F871, PIC16F872, PIC16F873, PIC16F876A, PIC16F877(A)(ICSP only), PIC16F627, PIC16F627A, PIC16F628, PIC16F628A, PIC16F648A, PICF6648, PIC16F676, PIC16F818, PIC16F819.



SMD

7			Cat.	Qty 1+	Qty 4+	Qty 10+
			XC-4402	\$139.00	\$124.95	\$110.95

Full Function Smart Card Reader / Programmer

Refer: Silicon Chip Magazine July 2003

This full function programmer allows you to program both the microcontroller and EEPROM in the popular gold, silver and emerald wafer cards. It hooks up to the serial port of your PC and can be operated as a free-standing unit or installed in a PC drive bay. Cards used need to conform to ISO-7816 standards, which includes ones sold by Jaycar.

Powered by 9V via a 9 - 12VDC plugpack (use MP-3146) or 9V battery. • Instructions outline software requirements

- that are freely available on the Internet.

 Kit supplied with PCB, wafer card
- socket and all electronic components
- PCB: 141 x 101mm

Jaycar Electronics and Silicon Chip Magazine will not accept responsibility for the operation of this device, its related software, or its potential to be used for unlawful purposes.

·	-	•	
7	Cat.	Qty 1+	Qty 5+
	KC-5361	\$54.95	\$49.45
REGULATED PLUGPACK TO SUIT	MP-3146	\$17.95 ea	

PC Controlled Stepping Motor

This kit will enable you to control the supplied stepper motor manually, or via your computer's parallel port with the software provided. You can accurately control the motors direction, speed and number of rotations. This kit has many uses and is only limited by your imagination. Use it to experiment in robotics, for camera panning, a radio antenna rotator or even to open the curtains in the morning. Kit supplied with PCB, stepper motor, software and all electronic components. Computer cable required Cat WC-7502.



7	Cat.	Qty 1+	Qty 5+
	KV-3594	\$49.95	\$44.90
COMPLITER CARLE TO SLIIT	WC-7502	\$13.95 ea	

HOUSEHOLD PROJECTS INDEX

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Tempmaster Fridge Thermostat Mk II	KC-5476	33

Tempmaster Fridge Controller Mk II

Refer: Silicon Chip Magazine February 2009

Want to convert an old chest freezer into an energy efficient fridge or beer keg fridge? Or convert a spare standard fridge into a wine cooler? These are just two of the jobs this low-cost and easy-to-build electronic thermostat kit will do. It can also build electrofine intermostat Rit Will do. It can also be used to control 12V fridges or freezers, as well as heaters in hatcheries and fish tanks. It controls the fridge/freezer or heater directly via their power cables, so there's no need to modify the internal wiring. Short-form kit contains PCB, sensor and all specified components. You'll need to add your own 240V GPO, switched IEC socket and case.



FCD. 00 X 0/IIIIII			
7	Cat.	Qty 1+	Qty 5+
	KC-5476	\$32.95	\$29.45





Ideal for turning fans or heaters on at certain temperatures

This kit operates a relay when a preset temperature is exceeded and drops-out the relay when temperature drops. The relay included is capable of switching small currents only, so a larger relay or switching device should be employed if switching mains voltages o heavy currents. Ideal as a thermostat, ice alarm, hydroponics applications, etc. A small trimpot is used to adjust the cutout temperatures for the relay in the range of approx -30 to +150° celcius

- PCB NTC thermocouple and components
 12VDC, 100mA

• PCB: 56 x 28mm	To a second		
7	Cat.	Qty 1+	Qty 5+
	KG-9140	\$24.95	\$22.35
12VDC PLUGPACK TO SUIT	MP-3147	\$17.95 ea	
RECOMMENDED BOX - UB5	HB-6015	\$2.95 ea	
	KG-9140 MP-3147	\$24.95 \$17.95 ea	

433MHz Remote Switch

Refer: Silicon Chip Magazine January 2009

Suitable for remote control of practically anything up to a range of 200m, for example as a replacement for a dead garage door opener. The receiver has momentary or toggle output and the momentary period can be adjusted. The receiver can also be used to drive a 12 volt relay - you'll need to add a 12 volt source. Up to five receivers can be used in the same vicinity and spare transmitter kits are available: KC-5474. A versatile kit with endless applications. Short-form kit contains two PCBs and all specified

- 433MHz
- Requires case an 9 -12VDC
- Extra transmitter KC-5474
- PCBs: Tx: 85 x 6 Rx: 79 x 48mm

	Cat.	Qty 1+	Qty 5+
Remote Switch Kit	KC-5473	\$44.95	\$40.45

Low Cost Programmable Interval Timer

Refer: Silicon Chip Magazine June 2008 Here's a new and completely updated version of a very popular project; an easily programmed low cost electronic timer. It operates from 12VDC, with low current drain: <50mA when relay is on, <5mA when relay is off. It is link programmed for either a single ON timing period, or continuous ON/OFF cycling and can be link programmed for any of 48

different time periods, separately for ON time and OFF time.
Selectable periods are 1/2/3/4/5/6/7/8/10/20/30/40/50/60/70/80 seconds, minutes and hours. It may be restarted at any time simply by pressing reset pushbutton. Kit includes PCB and all specified electronic components.

PCB: 102 x 42mm

7	Cat.	Qty 1+	Qty 5+	
	KC-5464	\$34.95	\$31.45	

The 'Flexitimer'

Refer: Electronics Australia March 1991

Now in it's third revision by Jaycar, the flexitimer uses a 555 timer coupled with a binary counter to create a simple and consistent timing circuit. In the original one-shot mode the timer will count up to the set point and switch the relay once. In the additional interval mode the timer will continue switching the relay at each recurrence of the set point. The circuit can be set at 11 time points with the minimum being 7 seconds and each step doubling the time to a maximum of 2 hours. Other times are possible by changing components C1, R1, and R2. Features of the third revision include a restarting the one-shot mode from an external switch or signal, a more energy efficient design, and space on the PCB for terminal blocks (not included).

- Requires 12- 15V DC (use Cat. MP-3147 plugpack)
 Optional UB5 case (Cat. HB-6015)
 PCB Dimensions: 74 x 47mm

7	Cat.	Qty 1+	Qty 5+
	KA-1732	\$19.95	\$17.70
12VDC PLUGPACK TO SUIT	MP-3147	\$17.95 ea	
RECOMMENDED BOX - UB3	HB-6013	\$3.95 ea	

Remote Control Digital Timer

Refer: Silicon Chip Magazine August 2010

Remote-controlled digital timer with a bright
20mm-high 7-segment red LED display. It can count up or down from one second to 100 hours in 1-second increments. Its timing period can either be set and controlled using the remote control or it can be automatically controlled via external trigger/reset inputs. An internal relay and

buzzer activate when the unit times out. The relay contacts can be used to switch devices rated up to 30VDC or 24VAC and the project can be powered from a plugpack or a battery. Short form kit only - you'll need to add your own universal remote, power supply and enclosure

- 9-12VDC @300mA
- PCB and components
 PCB: 80 x 80mm

7	Cat.	Qty 1+	Qty 5+
	KC-5496	\$39.95	\$35.90

Liquid Level Sensor

When two contacts are shorted by liquid, an LED will illuminate. Use in applications such as an overflow alarm and rain detector. Connect Relay Card KG-9142 for a relay output to operate lights, sirens or other warning devices.

- Project requires 9VDC.
- Kit supplied with Kwik Kit PCB and all electronic components.
- PCB: 45 x 15mm

7	Cat.	Qty 1+	Qty 5+
	KG-9138	\$9.95	\$8.75
RECOMMENDED BOX - UB5	HB-6015	\$2.95 ea	

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DMX Controller USB Interface	KV-3610	34, 280
DMX Relay Control Kit	KV-3612	35, 280

12V Light Operated Relay

This kit can operate as a twilight on/off switch or as a light trigger relay. Operated from 12 volts, this versatile project triggers a 6 amp relay when the light intensity falls below an adjustable threshold. Turn lights on around the house when it goes dark or trigger an alarm when a light is switched on. Kit supplied with Kwik Kit PCB, relay and all electronic

• PCB: 55 x 27mm

7	Cat.	Qty 1+	Qty 5+
	KG-9090	\$24.95	\$22.35
12VDC PLUGPACK TO SUIT	MP-3147	\$17.95 ea	

DMX Controller USB Interface

Add computer control to your DJ or stage show. The DMX protocol was developed with the purpose of controlling dimmers, scanners, moving heads and other lighting devices with simple wiring. It is mainly used in theatres and discos, but you can use it in any place where a central or automated lighting is needed. Use this kit to control DMX fixtures such as spotlights using a PC and USB interface. A comprehensive kit that includes software, USB cable and enclosure. There's also a DLL provided so you can write your own software if you like. It can also be operated in stand-alone mode that outputs all 512 channels at the same time (9V battery required for stand-alone mode).

- Test software and DMX Light Player software included
- 512 DMX channels with 256 levels each 3 pin XLR-DMX output connector
- Windows 98SE or higher compatible
 Optional 9V battery needed for stand alone test mode
 Dimensions: 106(L) x 100(W) x 44(H)mm
- PCB: 100 x 82mm

7	Cat.	Qty 1+	
	KV-3610	\$99.00	



Refer: Silicon Chip Magazine March 2011

This is an upgraded version of the original universal power supply kit published in August 1988. One small board and a handful of parts will allow you to create either a regulated ±15V rail or +15VDC single voltage from a single winding or centre tap transformer (not included). Substitute different

Power Supply Regulator

regulators to those supplied and you can alter the output voltage to your requirements. Upgrades in this design include improved parts layout and terminal blocks for inputs and outputs. Kit includes PCB and all components for 15 volt versions, transformer sold separately.

PCB: 72 x 30mm

LRAZU

- Power Supply Options:
 ±15V rails from 15V AC plug pack (MP-3059) or transformer (MM-2002)
- ±15V rails from 30V AC centre tapped transformer (MM-2007)
 +15VDC from a single or centre tap transformer.
- Different voltages using 78xx and 79xx series regulators (not included)

7	Cat.	Qty 1+	Qty 5+	
	KC-5501	\$14.95	\$13.35	
Transformer to suit	MM-2002	\$11.95		
Transformer to suit	MM-2007	\$8.95		
Plugpack to suit	MP-3059	\$29.95		

DMX Control Dimmer

PCB: 105 x 60mm

 Relay Hold function in case of DMX signal loss Switching capacity: 8ASupply voltage: 12VDC Power consumption: max. 100mA

DMX Relay Control

Control a relay with the DMX512 protocol. It is

• 512 unique addresses, DIP switch settable • LED indication for power supply, relay output and error status

contains DMX-512, XLR plug, PCB and all specified components.

Allows you to control a lamp or group of lamps through a DMX signal. You can use the USB

Controlled DMX Interface kit (Cat KC-5480) or any other control console compliant with the DMX-512 protocol as a controller. It will drive resistive loads like incandescent lamps & mains voltage halogen lighting. Short form kit contains XLR socket, PCB & all specified components. 512 unique addresses, selectable with DIP switch

KV-3612

actually a bus-controlled power driver. The relay will be activated when the DMX value of the set channel equals 140 or more and turns off when the value is 120 or less.

Team it with KV-3610 to make a computer-controlled automation system. Short form kit

- Status LED for power and error detection
- Toroidal filtering for low noise
- Stand alone mode for testing
 Load capacity: 1000 W @ 230V (5A)
 or 500W @ 115V
 Power Input: 115/230 VAC
 Dimensions: 150(L) x 60(W) x 45(H)mm

- PCB: 150 x 60mm





Qty 1+

\$29.95

POWER KITS INDEX

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Solar Charger MPPT	KC-5500	36
Universal +/- 15VDC & 5VDC Power Supply	KC-5418	35
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Voltage Regulator	KC-5446	35

LED Battery Voltage Indicator

Refer: Electronics Australia Sept 1995 Ouick battery condition indication

This tiny circuit measures just 25mm x 25mm and will provide power indication and low voltage indication using a bi-colour LED, and can be used in just about any piece of battery operated equipment. The circuit is suitable for equipment powered from about 6-30VDC. With a simple

circuit change, the bi-colour LED will produce a red glow to indicate that the voltage has EXCEEDED a preset value.

- PCB, bi-colour LED and components
- 6-10VDC 3-8mA PCB: 25 x 24mm

7	Cat.	Qty 1+	Qty 5+
	KA-1778	\$9.95	\$8.75
RECOMMENDED BOX - UB5	HB-6015	\$2.95 ea	

3V to 15V 1.5A Versatile **Regulated Voltage Adaptor**

Refer: Electronics Australia August, 1997

This kit is a low-powered DC converter for many car applications, for example, where you need a reliable voltage source for a portable CD player or similar battery-powered device. Another use for this adaptor is for a peripheral computer power supply to power device. Another use for this adaptor is on a peripheral computer power supply to power external Zip drives, powered speakers, modems, music/MIDI keyboards, etc. Just plug its input into your PC's internal power supply cable and get selectable regulated voltage out from 3 to 15VDC.

Output current capability is around 1.5 amps depending on the size of heatsink used - not included available consensation. All its all quite as

included, available separately). All in all, quite a handy little kit!



Input voltage MUST be larger than the required output voltage

PCD. 32 X THIIIII				
71	Cat.	Qty 1+	Qty 5+	
	KA-1797	\$7.95	\$6.95	
RECOMMENDED BOX - UB5	HB-6015	\$2.95 ea		

Universal +/- 15VDC & **5VDC Power Supply** Refer: Silicon Chip Magazine

October 2005

This will provide regulated +/- 15V and +5V outputs. Toroidal transformer required (use MT-2086). The kit comes with all specified board components and quality fibreglass tinned PCB. Originally designed for KC-5417 Headphone Amplifier

• PCB: 80 x 56mm

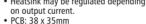
A	Cat.	Qty 1+	Qty 5+
	KC-5418	\$19.95	\$17.70
RECOMMENDED BOX - UB3	HB-6013	\$3.95 ea	

13V to 22VDC 1A **Voltage Regulator**

Refer: Silicon Chip Magazine May 2007

This handy voltage regulator can provide up to 1,000mA at any voltage from 1.3 to 22VDC. Ideal for experimental projects or as a mini bench power supply. Kit supplied with PCB and all electronic components.

- · Heatsink may be regulated depending





7	Cat.	Qty 1+	Qty 5+
	KC-5446	\$16.95	\$14.95
RECOMMENDED BOX - UB5	HB-6015	\$2.95 ea	

3V, 5V, 6V, 9V, 12V or 15V 4A Improved Low Voltage Regulator

Refer: Silicon Chip Magazine May 2008 Need to operate a CD, DVD or MP3 player from the cigarette lighter socket in your car? Or perhaps run some powered speakers from the power supply inside your PC? The odds are you'll need this little adaptor to step the voltage down. It has a push-on jumper shunt to select one of six common output voltages 3V, 5V, 6V, 9V, 12V or 15V and, when used with an appropriate input voltage and heat sink, can deliver up to four amps at the selected output voltage. Kit includes PCB and all specified components

Please note that to ensure trouble free 4 amp output., a heatsink with a thermal resistance of 1.4° C per watt, and an input voltage 3VDC above the output voltage is required.

• PCB: 108 x 37mm

7	Cat.	Qty 1+	Qty 5+
	KC-5463	\$17.95	\$15.95













POWER KITS (CONTINUED)

1.2V to 20VDC 1.5A **Switching Regulator**

Refer: Silicon Chip Magazine February 2012 Outputs 1.2 to 20V from a higher voltage DC supply at currents up to 1.5A. It is small, efficient and with many features including a very low drop-out voltage, little heat generation, electronic shutdown,

soft start, thermal, overload and short circuit protection. Kit supplied with PCB, pre-soldered surface mounted components and all PCB mount components







7	Cat.	Qty 1+	Qty 5+
	KC-5508	\$39.95	\$35.90

3V to 9V DC to DC Converter

Refer: Silicon Chip March 2004

9V batteries are a great source of portable power, but let's face it - they don't last long if you want more than a few milliamps, and they are not real cheap either. This great little converter allows you to use regular Ni-Cd or Ni-MH 1.2V cells, or Alkaline 1.5V cells for 9V applications. Using low cost, high capacity rechargeable cells, the kit will pay for itself in no-time! You can use any 1.2-1.5V cells you desire. Imagine the extra capacity you would have using two 9000mAh D cells in replacement of a low capacity 9V cell. Kit supplied with

PCB, and all electronic components.

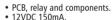
• PCB: 59 x 29mm

7	Cat.	Qty 1+	Qty 5+
	KC-5391	\$15.95	\$14.35
RECOMMENDED BOX - LIBS	HB-6015	\$2.95 ea	

DC Relay Switch

Refer: Silicon Chip Magazine November 2006

An extremely useful and versatile kit that enables you to use a tiny trigger current - as low as 400µA at 12V to switch up to 30A at 50VDC. It has an isolated input, and is suitable for a variety of triggering options, including an AC or oscillating signal. It also has a relay-on LED indicator.



7

•	PCB:	46 x	61mm	

		100	
7	Cat.	Qty 1+	Qty 5+
	KC-5434	\$16.95	\$14.95
RECOMMENDED BOY - LIBS	HR-6015	\$2.95.62	

12VDC Relay Card

Add a relay output to your equipment

This kit will close a relay's contacts with as little as 5mA to trigger the circuit. Literally any kit you see on these pages that uses an LED as a trip-condition indicator, can be used with this nifty project. Use the relay to sound buzzers, switch on lights, operate solenoids, trigger alarms, etc.

Operation: common ground - output LED to ground

- Kit includes Kwik Kit PCB, relay plus electronic components.
 LED cathode must be connected to ground.
- PCB: 45 x 17mm.

7	Cat.	Qty 1+	Qty 5+
	KG-9142	\$9.95	\$8.75

12/24VDC 20A Motor Speed Controller

Refer: Silicon Chip Magazine June 2011

Control the speed of 12 or 24VDC motors from zero to full power, up to 20A. Features optional soft start, adjustable pulse frequency to reduce motor noise, and low battery protection. The speed is set using the onboard trimpot, or by using an external potentiometer (available separately).

- Supplied with solder masked PCB with overlay and all onboard electronic components.
- · Optional 10K external potentiometer: use RP-3510
- PCR: 106 x 60mm

1 CD. 100 X 00111111			
71	Cat.	Qty 1+	Qty 5+
	KC-5502	\$39.95	\$35.90
RECOMMENDED BOX - UB3	HB-6013	\$3.95 ea	

240V 10A Deluxe Motor **Speed Controller**

Refer: Silicon Chip Magazine April 2009

Another motor speed controller? This one is a little bit different and offers boutique performance in the world of speed controllers. While the simpler circuit of our other motor controller kit (KC-5477) will control a motor's speed fairly well, it can't provide maximum speed as the output voltage is limited to about 160VAC maximum. It also doesn't provide great speed regulation and torque at low speeds. The deluxe kit addresses all these issues and provides full speed control from near zero to maximum RPM, good speed regulation under load, very smooth low speed operation and is rated for devices up to 2300W. It also has soft-start to eliminate the "kick" from larger power tools and has interference suppression filtering, fuse protection and over-current protection with limiting.

This kit really is the duck's guts for motor speed control. The case has the tricky cutouts premachined, but a little bit of extra drilling is required to complete the project.

- Overlay PCB and all components.
- Machined case included
- PCB: 112 x 142mm

7	Cat.	Qty 1+	Qty 5+
	KC-5478	\$99.95	\$89.95

12V 120W 3-Step MPPT Solar Charge Controller

Refer: Silicon Chip Magazine February 2011

Charge controllers are essential for solar setups, although commercial units can run into several hundred dollars Designed for use with 40W to 120W 12V solar panels and lead acid batteries, this solar charge controller kit provides 3-stage charging with the option of equalisation and with MPPT (Maximum Power Point Tracking). Operation is for 12V panels and batteries, but a 24V upgrade will be available in future. Kit includes PCB, all components and case.

- Suitable for 40W to 120W 12V solar panels
- 3-step charging
 MPPT (maximum power point tracking) charging
- Charge indicator LEDs
- Temperature compensation for charge voltage
 Optional equalisation cycle
 Optional 24V 80W to 240W operation upgrade

- PCB: 111 x 85mm

7	Cat.	Qty 1+	Qty 5+
	KC-5500	\$129.00	\$115.95

SECURITY PROJECTS INDEX

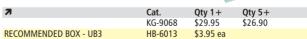
ecurity	Cat.	Page
R Detector	KG-9086	36
R Floodlight	KG-9068	36

Infrared Floodlight

Let your CCD camera see in the dark! This infrared light is powered from any 12-14VDC source and uses 32 x infrared LEDs to illuminate an area of up to 5-metres (will vary with light conditions). The PCB measures 56 x 75mm and draws a current of about 300mA

· Kit is supplied with silkscreened/ gold plated/ soldermasked PCB, 32 x Infrared LEDs and all electronic components. Use our plugpack supply, MP-3282. Not suitable for colour CMOS cameras.

• PCB: 74 x 55mm



Infrared Detector

This kit will switch on LED when it detects infrared light from sources such as IR remote controls. Connect it to the Relay Card kit KG-9142 to make an infrared remote controlled relay. Project requires 9VDC

- Can be battery powered.Kwik Kit PCB, Infrared receiver and all electronic components.
- Use to test if your remote control is working.

. cs. ss x .s					
7		Cat.	Qty 1+	Qty 5+	
		KG-9086	\$9.95	\$8.75	
RECOMMENDE	ED BOX - UB5	HB-6015	\$2.95 ea		







Kits - Test Equipment & Sci-Fi Projects

TEST EQUIPMENT INDEX

Test & Measurement	Cat.	Page
Digital Multimeter Kit	KG-9250	37
Transistor Tester	KA-1119	37
Ultrasonic Water Tank Level Indicator NEW	KC-5503	37

Digital Multimeter Kit

Learn everything there is to know about component recognition and basic electronics with this comprehensive

kit. From test leads to solder, everything you need for the construction of this meter is included together will a detailed manual. With test questions and schematic supplied in the manual, the kit can be geared to an individual or class learning environment, making it an excellent choice for first year trade apprentices. Kit includes DMM case, LCD, solder, battery, test leads, PCB, comprehensive 18 page learning manual and electronic components.



All you'll need is a soldering iron.
 Meter dimensions: 67(W) x 123(H) x



Obviously we have a HUGE range of ready to go DMMs in our Test Section on page 151

7	Cat.	Qty 1+	Qty 5+
	KG-9250	\$24.95	\$22.35

Transistor Tester

Refer: Electronics Australia September 1983

Have you ever unsoldered a suspect transistor only to find that it checks OK? Troubleshooting exercises are often hindered by this type of false alarm. You can avoid these hassles with the In-Circuit Transistor, SCR and Diode Tester. The kit does just that, test drives WITHOUT the need to unsolder them from the circuit! VERY HANDY! Kit includes a Jiffy box, battery and electronic components and panel showing truth table for device checking.

- Voltage drop & temperature rise (dT/dt) full charge detection for Ni-cd & Ni-MH
- Under and over temperature cut-out for battery protection
- Over temperature cutout for charger Short circuit battery protection
 Time-out protection Fuse protection
- Multi-LED charge indicators
- Multi-LED charge markators Kit includes case, professionally punched & silk-screened panels, PCB, quality toroidal plus all specified electronic components.
- PCB: 70 x 57mm

7	Cat.	Qty 1+	Qty 5+
	KA-1119	\$27.95	\$24.95

Ultrasonic Water Tank Level Indicator

Refer: Silicon Chip September 2011

Designed for plastic and concrete tanks, or steel tanks with modification, this water level indicator kit uses an ultrasonic assembly that mounts inside the tank and a microprocessor controlled meter to display the water level. Selectable between 10 LED Bargraph or 19 level





can be pushbutton or permanent display, powered by a 9V battery or power adaptor (available separately) and can be used with fluids other than water. Kit includes PCB, waterproof case and all electronic components. Silicon sealant not included

- Suits tanks up to 2.4m highPCB: 104 x 78.5mm

7	Cat.	Qty 1+	Qty 5+
	KC-5503	\$74.95	\$67.50

SCI-FI KITS INDEX

c-Fi	Cat.	Page
cob's Ladder Mk II	KC-5445	37

Jacob's Ladder High Voltage Display Kit MK2

Refer: Silicon Chip

Magazine April 2007
With this kit and the purchase of a 12V ignition coil (available from auto stores and parts recyclers), create an awesome rising ladder of noisy sparks that emits the distinct smell of ozone. This improved circuit is suited to modern high power ignition coils and will deliver a spectacular visual display. Inspired by the good doctor's laboratory in

the Frankenstein movie, use this kit for theatre special effects or just to impress your friends.

Kit includes PCB with overlay, pre-cut wire/ladder and all electronic components

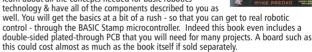
- 12V automotive ignition coil and case not included
 12V car battery, 7Ah SLA or >5Amp DC power supply required and not included.

Warning: The Jacobs Ladder Kit uses potentially dangerous voltage.

71	Cat.	Qty 1+	Qty 5+	
	KC-5445	\$42.95	\$38.45	

123 Robotics Experiments For The Evil Genius

Frankly, the "Evil Genius" series of books started a few years ago and the publisher realised that it grabbed the attention of many. We reviewed one early title and were horrified at the VERY DANGEROUS projects described therein. This book, however, is an absolute delight. Written by the brilliant Myke Predko, the book starts with the basic concepts of robotics. In many ways it starts at "Too Simple". We mean this because Myke describes a couple of silly projects to start, i.e. a "doll" made out of the cardboard tubes from toilet paper rolls. He gets into gear quickly, however. (Start reading from page 15 and have an inches metric conversion table handy!) You will learn about all the concepts needed for basic robotics



- 355 pages
- Softcover 275(H) x 215(W)mm

7	Cat.	Qty 1+
	BM-7104	\$29.95

CAN'T FIND THE KIT YOU'RE LOOKING FOR?

If you can't find what you're looking for, try the Jaycar Kit Back Catalogue. To keep up with the constant flow of new kits and maintain an up to date in-store line-up of projects, older and slow moving kits are returned to our central warehouse. We have included in this catalogue a number of the Kits that form our Back Catalogue. The range is divided up into sections. In this listing is included a brief description, the reference magazine and issue date of the article, a catalogue reference number and a unit price.

Magazine Icons







Electronics Australia Silicon Chip Magazine (SC) (EA)

kits (no articles available) Issue is referenced by month then year (MM/YY).

If the article ran over several months only the first month is referenced. Dozens of kits listed on the following page!!!



For the absolutely latest list refer to our website www.jaycar.com.au/kitbackcatalogue

KIT BACK CATALOGUE

For more details on our Kit Back Catalogue see the previous page Three easy ways to order these Kits:

- 1. Order online at www.jaycar.com.au
- 2. Call our Free Call Order Hotline on 1800 022 888
- 3. Use the order form on page 495 and fax it to our Techstore

AUDIO KITS

Description	Magazine	Issue	Cat.	1+
115WRMS/8Ω, 175WRMS/40hm Power Amp Module	SC	04/96	KC-5201	\$95.95
Bass Blazer Baragrph Display	SC	02/01	KC-5305	\$49.95
CD Audio Compressor Kit	SC	06/00	KC-5291	\$83.95
CDROM Controller for Audio Playback	SC	12/07	KC-5459	\$64.95
Guitar Mixer 4 Channel 12VDC	SC	06/07	KC-5448	\$99.00
Power Amp Module 115W RMS/8 Ohm / 175WRMS/4 Ohm	SC	04/96	KC-5201	\$95.95
Power Supply to suit 135W Distortion MkII Amplifier	SC	09/08	KC-5471	\$55.95
Power Supply to suit SC-480	SC	01/03	KC-5347	\$17.95
SC-480 50W Mono Amplifier Module V1 TO-218	SC	01/03	KC-5345	\$49.95
Stereo Headphone Distribution Amplifier Kit	SC	11/05	KC-5417	\$34.95
Studio 350 - High Power Amplifier	SC	01/04	KC-5372	\$175.00
Subwoofer Controller	SC	08/07	KC-5452	\$99.95
Theremin Synthesiser Kit	SC	08/00	KC-5295	\$59.95
Theremin Synthesiser - Midi	SC	04/05	KC-5410	\$159.00
Universal Speaker Protection & Muting Module	SC	07/07	KC-5450	\$34.95

AV KITS

Description	Magazine			1+
Annunciator with 75mm High Digits - 00 to 99	SC	12/05	KC-5420	\$59.95
AV Booster Kit	SC	04/03	KC-5350	\$99.95
AV Distribuiton Amplifier with S-Video - Low Cost	SC		KC-5321	
Composite AV Distribution Amplifier - Low Cost	SC			\$139.95
Dr Video Enhancer/Stabiliser MkII	SC	06/04	KC-5390	\$99.95
Low Cost Composite Video/Audio Distribution Amplifier	SC	11/01	KC-5320	\$139.95

RADIO/FM KITS

Description	Magazine Issue	Cat.	1+
100-200MHz VHF Converter	Kwik Kit	KG-9128	\$29.95

VIDEO KITS

Description	Magazine	Issue	Cat.	1+
Component Video RGB Converter	SC	05/04	KC-5388	\$99.95
Dr Video Enhancer/Stabiliser MkII	SC		KC-5390	
RGB to Component Video Converter	SC	08/04	KC-5398	\$89.95
Video Enhancer / Stabiliser Kit	EA	08/97	KA-1798	\$78.95
Video Enhancer & Y/C Separator	SC	08/04	KC-5394	\$179.00

AUTO KITS

Description	Magazine	Issue	Cat.	1+
12V LED Light - PCB for Festoon 31mm (Interior Light)	SC	03/03	KC-5354	\$4.95
12V LED Light - PCB for Festoon 41mm (Interior Light)	SC	03/03	KC-5355	
AV Booster/ Repeater Amplifier	SC	04/03	KC-5350	\$99.95
Car Air Conditioner Controller	SC	01/07	KC-5437	\$39.95
Car Turbo Timer with Case - PIC Based	SC	08/07	KC-5451	\$44.95
Delta Throttle Timer	SC Book		KC-5373	
Digital Fuel Adjuster	SC Book		KC-5385	\$69.95
Digital Fuel Mixture Display	SC	09/00	KC-5300	
Digital Pulse Adjuster	SC Book		KC-5384	
Digital Speedo Ćorrector	SC Book		KC-5380	
Digital Speedometer/Speed Alert	SC	11/99	KC-5279	
Driving Light Protector	SC	09/02	KC-5337	
Engine Immobiliser MK II	SC	12/98	KC-5255	
Fuel Cut Defeater	SC	02/07	KC-5439	+
Gear Indicator	SC	01/03	KC-5344	
Independent Electronic Boost Controller	SC Book		KC-5387	7
Intelligent Turbo timer	SC Book		KC-5383	
Knock Sensor to suit KC-5442	SC	03/07	KC-5444	
LED Duty Cycle Meter for Fuel Injected Cars	SC Book		KC-5375	\$54.95
Marine Engine Speed Equaliser			KC-5488	
Nitrous Fuel Mixture / Motor Speed Controller	SC Book		KC-5382	
PC Board for 12V LED Bayonet Style Lamp Kit (Stop / Tail)	SC	03/03	KC-5349	+
PC Board for 31mm Festoon Style (Interior Light) Kit	SC	03/03	KC-5354	\$4.95
PC Board for 41mm Festoon Style (Interior Light) Kit	SC	03/03	KC-5355	
Quick Brake - Emergency Light Trigger	SC Book		KC-5373	\$24.95
Turbo Timer	SC	11/98	KC-5254	
Turn Your Car Into A Volvo	SC	08/99	KC-5273	\$39.95
Universal High Energy Ignition Kit	SC	12/05	KC-5419	\$94.95

COMPUTER KITS

Description	Magazine	Issue	Cat.	1+
AVR Adaptor Board for KC-5340	SC		KC-5421	
Front End Pre-Amp For PC Sound Cards	EA		KA-1811	
PC Infrared Transceiver Kit	SC		KC-5323	
PC IR Remote Control	SC	08/03	KC-5366	\$39.95
PIC Programmer Checkerboard	SC		KC-5307	
	SC	05/08	KC-5467	\$74.95
Test Instrument Interface for PC Sound Cards	EA		KA-1811	
USB Power Injector	SC	10/04	KC-5399	\$29.95

HOUSEHOLD KITS

Description	Magazine	Issue	Cat.	1+
Clock Watchers Clock Kit with Blue LEDs	SC	06/05	KC-5416	\$189.00
Clockwatcher's LED Clock -Analogue & Digital - Red	SC	06/05	KC-5404	\$129.00
Digital Reaction Timer Kit	SC	06/03	KC-5360	\$24.95
Door Bell Remote Control	SC	09/04	KC-5397	\$14.95
Driveway Sentry	SC	11/04	KC-5402	\$179.00
Jacob's Ladder High Voltage Display Kit	SC	09/95	KC-5191	\$34.95
Portable Wireless Doorbell Kit	SC	09/04	KC-5397	\$14.95
SMS Controller for Nokia Mobile Phones (5110/6110)	SC	10/04	KC-5400	\$57.95
UHF Remote Controlled Main Switch	SC	02/08	KC-5462	\$99.95
V8 Sounding Doorbell - Full Kit	SC	01/05	KC-5405	\$79.95
V8 Sounding Doorbell - Short Form	SC	01/05	KC-5406	\$49.95
Water Level LED Indicator MkII	SC	07/07	KC-5449	\$39.95
Water Tank Level Meter - PIC Based	SC	11/07	KC-5460	\$109.00
Water Tank Level Meter Telemetry Base Station	SC	01/08	KC-5461	\$84.95

LIGHTING KITS

Description	Magazine	Issue	Cat.	1+
12VDC Emergency Lighting Controller	SC		KC-5456	
Basketball Scoreboard & Console - Wireless	SC	03/05	KC-5408	\$799.00
Basketball Scoreboard Extra Scoreboard - Wireless	SC	03/05	KC-5409	\$649.00
Bass Blazer Bar Graph Display	SC	02/01	KC-5305	\$49.95
Luxeon LED Star Module Driver	SC	05/04	KC-5389	\$29.95
Neon Tube Sound Display Kit	SC	11/01	KC-5322	\$19.95

POWER KITS

Description	Magazine	Issue	Cat.	1+
12VDC-240VAC Inverter - Super Simple	Kwik Kit		KG-9006	\$19.95
12VDC Car Battery Charger/Regulator	SC	07/97	KA-1795	\$20.00
Battery Zapper MkI - Lead Acid	SC	08/05	KC-5414	\$39.95
Battery Zapper MkII Add-on	SC	05/06	KC-5428	\$59.95
Battery Zapper MkII for SLA Batteries	SC	05/06	KC-5427	\$109.00
Power Tool Battery Charge Controller	SC	12/06	KC-5436	\$39.95
Universal Drill/Motor Speed Controller	SC	02/09	KC-5477	\$64.95

SCI-FI KITS

Description	Magazine	Issue	Cat.	1+
Jacob's Ladder High Voltage Display MkI	SC	12/95	KC-5191	\$34.95
Starship Enterprise Door Sound Simulator	SC	05/06	KC-5423	\$39.95

SECURITY KITS

Description	Magazine	Issue	Cat.	1+
4 Channel CCTV Switcher	SC	06/01	KC-5316	\$59.95
50 Metre IR Light Barrier	Kwik Kit		KG-9196	\$49.95
Alarm Raucous	SC	01/02	KC-5327	\$29.95
Annunciator Kit	SC	12/05	KC-5420	\$59.95
Driving Light Anti-Theft Kit	SC	09/02	KC-5337	\$19.95
IR Light Barrier 18 Metre	Kwik Kit		KG-9096	
Raucous Alarm	SC	02/02	KC-5327	
RFID Security Module Receiver Kit	SC	06/04	KC-5393	
Screecher Car Alarm MKII	EA	01/99	KA-1813	\$29.95
SMS Controller Module	SC	11/04	KC-5400	\$57.95
Swimming Pool Alarm Kit	SC	09/00	KC-5298	\$42.95
Telephone Dialler Kit for Burglar Alarms (Modem rqd)	SC	01/03	KC-5348	\$65.00

TEST KITS

Description	Magazine	Issue	Cat.	1+
AC/DC Current Clamp Adaptor for Multimeters	SC	09/03	KC-5368	\$34.95
LED Duty Cycle Meter for Fuel Injected Cars	SC Book		KC-5375	\$54.95
Peak-Hold Injector Adaptor	SC Book		KC-5395	\$19.95

SHORT CIRCUITS 3

Description	Magazine I	ssue	Cat.	1+
Short Circuits 3 Project #31 Computer Driven Display	SC3		KJ-8112	\$20.95
Instructions for SC Project 31	SC3		KJ-8113	\$2.50

Modules - Pre-Assembled

REDUCER MODULES - 24 TO 12VDC

1.1 Amp Continuous

With the aid of this module it is feasible to operate



\$22.95

\$20.35

\$18.35

AA-0265

3 Amp 24V to 12V Reducer

Many trucks and boats use 24V systems. These converters will allow you to run a reasonably sized 12V car-stereo or other devices from a 24V supply. Heatsink (not included) should be used for superior performance.

Specifications	
Short-circuit protection	Thermal cutout.
Input voltage	24 to 26VDC
Output voltage	12VDC
Maximum load	3A
Dimensions	135(L) x 50(W) x 24(H)mm
Heatsink	50 x 100 x 30mm (rec. size) use Cat. HH-8572 or similar

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	AA-0266	\$29.95	\$26.90	\$23.70

PRE-ASSEMBLED MODULES

Adjustable DC-DC Converter

This handy unit will give an output from 3V to 15VDC @ 1.5A from an input of 6-28VDC about 2A. (The input voltage only has to be 3V higher than the output volts). The output voltage is regulated and short circuit protected. Will need modest heatsink for large voltage differentials.



• Dimensions: 58(L) x 45(W) x 20(H)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	AA-0218	\$29.95	\$26.90	\$23.70

DC to DC Voltage Step-up Converter

This compact DC to DC converter will double the voltage applied to its input terminals and produce an output voltage in the range of 11 to 26 volts DC at up to 2 amps. This allows you to operate 12 volt car radios, CB radios, amplifiers etc. in a 6 volt car or motor cycle etc. A potentiometer can be added to 'fine tune' the output voltages as required.

Specifications	
Input voltage	6 to 14VDC
Output voltage	11 to 26VDC
Output current	2 amps Max. (Depends on output voltage)
Dimensions	82(W) x 60(D) x 23(H)mm

7				Cat.	Qty 1	+	Qty 3+	Qty 6+	
				A A A A A A A A A A A A A A A A A A A	¢ 4 4 0	г	¢40.4E	¢ar oo	

Battery Discharge Protector

Protects your car battery from total discharge by switching off appliances such as fridges and TV sets before the battery voltage drops to an unrecoverable level. When battery voltage is re-established by recharging, it switches appliances on automatically. The interrupting voltage is adjustable from 10.4.to13.3 VDC. Essential low-cost insurance if you have a dual battery setup in a boat, 4WD, RV or for an alternative energy system such as solar or wind power.

7	Cat.	Otv 1+	Otv 3+	Otv (
Dimensions	87(L) x 60(W) x 32(H)mm			
Current consumption	< 0.7mA when OFF, < 1.6mA	when ON		WARR
Resetting voltage	approx. 0.8V (+/-0.3V) above		ige	WARR
Interrupting voltage	10.4 - 13.3VDC			
Max. switching current	20A			
Operating voltage	12VDC			
Specifications				

AA-0262

Master/Slave Switcher 230V

When a master mains appliance (up to 4kW) is turned on this device will switch another mains appliance (240V up to 10A) on or off via a single pole changeover relay. Hundreds of uses.

Dimensions: 65(L) x 65(W) x 35(H)mm



7	Cat.	Qty 1+	Qty 10+	Qty 25+
	AA-0212	\$36.95	\$33.45	\$29.45

12 Volt Twilight Switch

This handy module senses the ambient light level and will switch external devices on/off at night and in the morning. The unit operates from 12VDC and its changeover contacts are rated at 25VDC @ 3A. Power consumption is only 2mA so it is ideal for automotive or battery-driven applications. Use it for garden lighting or security applications etc.



- Supplied fully assembled and tested.
 Dimensions: 72(L) x 50(W) x 32(H)mm

7	Cat.	Qty 1+	Qty 10+	Qty 25+
	AA-0323	\$23.95	\$21.35	\$18.95

12VAC Motor and Lamp Controller

Continuously controls the speed of 12VAC motors and can also be used as a dimmer for incandescent lamps. With the addition of a rectifier, it can also be used to control DC motors and if you add a 100k or 200k pot, you can control 24 or 48V devices. Suitable for iron core transformers only.

Specifications	
Mode of operation	Phase control
Control range	approx. 0 - 90 %
Loading capacity	For resistive or inductive loads up to 10A max
Dimensions	approx. 87(L) x 60(W) x 32(H)mm

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	AA-0347	\$54.95	\$49.45	\$43.90

Incandescent Lamp Flashers

FIXED - CAT. AA-0214

When connected in series within a 240V incandescent lamp (up to 600W) the lamp will turn off and on (95% brightness) fairly slowly - about once a second approximately!

- External fuse & suppressor capacitor (RG-5257) required.
- Dimensions: 60(L) x 45(W) x 20(H)mm

ADJUSTABLE - CAT. AA-0242

This unit only has 4 wires, 2 to the mains and 2 to the lamp. Will electronically switch on/off from 0.6-9.0 secs adjustable, lamps from 15-300 watts, incandescent only

- External fuse & suppressor capacitor
- (RG-5257) required Dimensions: 70(L) x 50(W) x 40(H)mm with surface mount lugs

7	Cat.	Qty 1+	Qty 5+	Qty 10+
Fixed	AA-0214	\$24.95	\$22.35	\$19.70
Adjustable	AA-0242	\$29.95	\$26.90	\$23.70

PWM Controller

Control DC loads such as motors, lamps etc. Pulse Width Modulation(PWM) also allows electric motors to start smoothly at low RPM. Control range is approximately 5 % to 95 % of maximum output, set with a 47k potentiometer.

Specifications	
Operating voltage	9 - 28 V/DC
Max. current	10A with heatsink,
carrying capacity	5A without heatsink
Control range	< 5% to > 95%
Control mode	pulse width modulation
Dimensions	86(L) x 60(W) x 33(H)mm

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	AA-0349	\$69.95	\$62.95	\$55.95



\$35.90

\$31.90

PRE-ASSEMBLED MODULES (CONTINUED)

Tank Level Indicator Module

Battery-powered level indicator for measuring the level of water tanks from a distance of up to 100m. To take a measurement, you simply press the button on the front panel giving 1 - 10 LED level readout. You'll need an 11 core cable to utilise all the measurement points, but you can use less if you like. No sensor is required as it works by simply sensing which conductor is submerged. No current is drawn except when taking measurements, so the

batteries last for years. Requires 2 x AA batteries. Not suitable for combustible liquids

such as petrol or diesel.



Specifications	
Operating voltage	3VDC
Current consumption during measurement	max 50mA
Measurement current	50μA per channel
Max. cable length	100m
Dimensions	120(L) x 70(W) x 20(H)mm

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-0370	\$49.95	\$44.90	\$39.90

Phase Coupler Module

Capacitively connects three mains phases with each other so that transfer rates of up to 200 Mbit via the mains supply can be reached for Internet and networking (depending on the nature of the mains supply). If the signal is fed into a single phase supply, the phase coupler connects all 3 phases with each other so that these become permeable to the power line signal and the Internet or computer signal will also be available at all other sockets of the in-house network. Also suitable for wireless intercoms. A considerable increase of the range and transmission quality may be achieved.



Note! This product must be installed by a licensed electrical contractor.



AA-0268

\$49.00

\$45.95

\$38.95

12V 3A Timer Module 2 Seconds to 23 minutes

A versatile and useful timer module that can be set for periods of 2 seconds to 23 minutes. The start and stop functions are controlled by simple switch inputs and the relay output can control a device of up to 23V 3A.

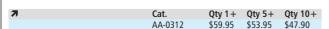
Specifications	
Operating voltage	12V
Current consumption	20mA
Time adjustment	2 sec to 23 min
Dimensions	60(L) x 45(W) x 20(H)mm

7		Cat.	Qty 1+	Qty 4+	Qty 10+
		AA-0364	\$34.95	\$31.45	\$27.90

4 Channel 1200 Watt 230 Volt Light Chaser

The kit consists of a 'Black Box' with input leads for the 240VAC supply and 5 output leads (4 channels with common). You can connect as many lights to each channel as you wish up to a maximum load of 300 watts per channel. Can be used to attract attention to billboards, shop windows, exhibition stands etc. Maximim Load 1200 watts. Please note that this kit operates on 240VAC mains voltage and you should be extremely careful when using these voltages. If in doubt, have an electrician check your work before applying power.

• Measures approx. 144(W) x 55(H) x 70(D)mm.



Freecall order hotline: 1800 022 888

Mains Motor and Lamp Controller

This module can be used for various mains rated applications including lamp dimming, soldering iron temperature adjustment and collector or split-pole motor speed control. Features a 600W continuous and 1200W peak loading capacity with adjustable potentiometer control. Please note: fluorescent, quartz and energy saving lamps, and motors with starting capacitors should not be used with this module.

· Knob included

		POWN MALE LINE
Specifications:		Marion:
Continuous power:	600W	
Maximum power:	1200W	
Dimensions:	62 x 35 x 21mm	

Please note that this kit operates on 240VAC mains voltage and you should be extremely careful when using these voltages. If in doubt, have an electrician check your work before applying power.

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	AA-0346	\$34.95	\$31.45	\$27.90

LED Tester Module

With this basic but essential tool it is possible to check the function, brightness, colour and polarity of all kinds of light emitting diodes (LED). The LED to be tested plugs into the front panel, at the current you wish to test it with. Two 10mA positions have been included on this multi-LED tester so that comparisons between two LEDs can be made simultaneously.



Operating voltage: 9V
Test currents: 1mA, 2.5mA, 5mA, 10mA, 20mA,50mA

• Dimensions: 58 x 44 x 25mm

7	Cat.	Qty 1+	Qty 10+	Qty 25+
	AA-0272	\$17.95	\$13.35	\$9.75

Universal Preamplifier Module - 1 Channel

For microphones and diverse uses. This mini-module is simply connected between a power amplifier and a weak signal source (e.g. microphone).

Specifications:	
Operating voltage:	9 to 24VDC
Frequency response:	10Hz to 100kHz
Input:	2-50mV
Output:	200mV - 1V
Dimensions:	30 x 25 x 15mm

7	Cat.	Qty 1+	Qty 2+	Qty 4+
	AA-0220	\$17.95	\$15.95	\$14.35

Universal Amplifier Modules - 1 Channel

3.5 WATT

Ideal as a bench-test amplifier for audio sources, or even as a mono headphone amplifier, this small audio amplifier can be operated from 4.5 V up to 12 VDC. Use two for stereo.

Specifications:	AA-0223 - 3.5 Watt
Output power:	3.5 W (max)
Operating voltage:	4.5 to 12 V
Speaker impedance:	4-16 ohms
Input sensitivity:	< 80mV
Frequency response:	40Hz-20kHz
Dimensions:	30 x 25 x 15 mm

12 & 40 WATT

These small audio amplifier modules are suitable for a number of purposes. Modules available in 12W and 40W versions and have a range of suitable input voltages and load impedances. The 40W module is a bridge-mode amplifier, so the speaker it is connected to can not have an earthed terminal

Specifications:	AA-0225 - 12 Watt	AA-0227 - 40 Watt
Operating voltage:	6V - 16V, 800mA (max)	6V -16V, 4A (max)
Output power:	12W (max) into 4-16 ohms	40W (max) into 4-8 ohms
Frequency range:	40Hz-20kHz	20Hz-25kHz
Input sensitivity:	80mV	500mV
Dimensions:	62 x 36 x 23mm	62 x 36 x 23mm

7	Cat.	Qty 1+	Qty 2+	Qty 4+
3.5W	AA-0223	\$17.95	\$15.95	\$14.35
12W	AA-0225	\$23.95	\$21.35	\$18.95
40W	AA-0227	\$44.95	\$40.45	\$35.90

Kits - Short Circuits Series

LEARNING ELECTRONICS IS FUN!!!

What it's all about...

Since its inception, the Short Circuits learning system has become the preferred platform from which students can confidently tackle the various levels of modern electronics. The system consists of the Short Circuits books and their own series of construction projects. Although written with beginners in mind, the books are incredibly thorough without being intimidating and most importantly, they're written with an emphasis on

FUN! All books in the series are geared towards specific levels of electronics knowledge.

Short Circuits Vol 1 acts as an introduction to electronics, absolutely NO previous knowledge of electronics is needed! Short Circuits Vol 2 assumes the reader/constructor has knowledge up to the end of Short Circuits Vol 1. It contains over 20 exciting projects and introduces the novice to soldering etc. Short Circuits Vol 3 extends the concept. After completing Volume 3, there would be no reason why the constructor couldn't tackle virtually any construction project they desire! All books are lavishly illustrated and collectively boast over 70 exciting projects; each project logically follows from the previous one so while having enormous fun for the constructors knowledge is steadily progressing without mysterious gaps.

The operation of each project is fully described, along with full descriptions of the components you will encounter along the way. To maximise the fun and acquisition of learning, constructors are also shown how to modify and experiment with component changes and how they will change the performance of the project. Explanations of all technical terms are given in plain English - the books are a great read themselves.



Short Circuits Volume I



Short Circuits Volume II



Our first book in the series uses a learning system designed around a baseboard, which you use to mount their projects. All components are connected together by our exclusive spring terminals. They are extremely easy to use, and don't even require a screwdriver.

At the back of the book is a paper template for each project, which attach to the baseboard. The springs are then inserted into the baseboard according to the locations shown on the template. The template then shows EXACTLY where each component goes, making project success almost a

The projects are fun to build and, more importantly, are very relevant to today's electronics. Each of the 20+ projects is powered from batteries and requires absolutely no soldering, making this learning system safe for ages 8+.

Otv 1+

- Soft cover 96 pages
- 205 x 275mm

Cat. BJ-8502

Once constructors have the basic skills and knowledge either from a School Design and Technology course, or tackling Short Circuits Vol 1, you can now have some real fun! With this book (and associated project packs available separately - see following pages) they can make such things as a mini strobe light, police siren, mini organ, a couple of powerful radio transmitters, an FM radio - even a 'Knight Rider' scanner!!

All components are fully described and explained, along with tutorials on soldering iron and multimeter use. All projects are safe and battery

- Soft cover full colour 148 pages
- 205 x 275mm



Cat. BJ-8504

Short Circuits Volume III



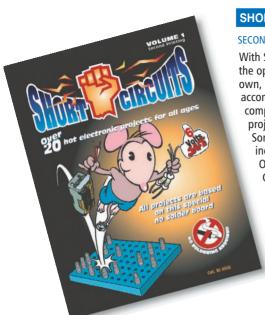
This is the definitive electronics training manual and is far more than the weekend "fun-type", superficial approach to electronics. This volume presents more than 30 individual printed circuit board-based construction projects.

Naturally, soldering techniques are discussed in detail, as is the proper use of a digital multimeter. We describe projects that take from just 20 minutes to make (such as project 2, Ding Dong Doorbell), to a fully fledged Guitar Sustain which may take several hours to complete, but will give constructors an accessory that can last a lifetime.

Each project contains a full technical description. with experimental changes to each circuit also explained. After constructors have built any or all of the described projects, there is no reason why they would not be able to successfully tackle any of the construction projects published in the electronics magazines. This book will end up giving them the knowledge and skill that will elevate them into a fully fledged constructor!

- Softcover full colour 128 pages
- 205 x 275mm

7	Qty 1+	
Cat. BJ-8505	\$14.95	

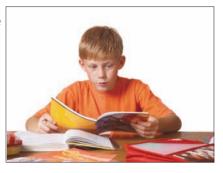


SHORT CIRCUITS VOLUME I

SECOND EDITION

With Short Circuits Volume 1, we give the option of buying the book on its own, or together with the accompanying kit that contains the components for each of the 20-odd projects described in the book.

Some of the exciting projects include a Police Siren, Electronic Organ, Sound Effects Unit, Light Chaser and a Solar Powered Radio (an inexpensive solar panel is optional and available



separately). Of course, many more projects are included! Remember, no prior knowledge of electronics is needed and the projects are totally safe. This volume will teach constructors everything they need to get started in electronics and is suitable for ages 8+. Kits contain small parts.

- · Circuit diagrams included for each project
- · Safe 6 volt system
- Techtalk discusses circuit operation and is written in a clear, easy to understand language
- Component layout on the special breadboard is clearly illustrated for each project
- Fun characters introduce each project, explaining the projects use



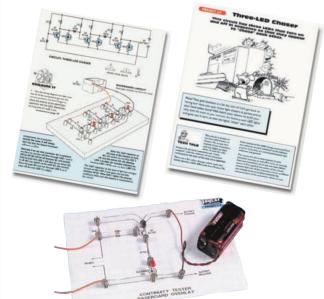
SOME OF THE EXCITING PROJECTS THAT YOU CAN BUILD FROM THIS BOOK INCLUDE:



- SHORT CIRCUIT TESTER
- MAGIC EYE LIGHT ALARM
- POLICE SIREN
- ELECTRONIC ORGAN
- SOUND EFFECTS UNIT
- LIGHT CHASER
- SOLAR POWERED RADIO

Book Cat BI-8502 \$9.95

- 3 TYPES OF TRANSISTOR AMPS
- COMPUTER TYPE CIRCUITS
- AND MANY MANY MORE



NOTE!

Reviewed in Electronics Australia May 2000

"It's all very well done, and I'm not surprised that the Short Circuits book and matching kit of parts have proved very popular with schools and colleges, as well as beginning hobbyists. Together they provide an excellent way for newcomers to 'dip their toes' into the wonders of electronics, in an enjoyable and hassle-free way. And of course it has all been designed and published right here in Australia - a credit to all concerned."

Freecall order hotline: 1800 022 888

NO PRIOR KNOWLEDGE OF ELECTRONICS NEEDED

Short Circuits Book

SECOND EDITION

This full colour 96 page book, which measures 205mm x 275mm is lavishly illustrated with over 100 drawings and diagrams. Each project features components which are "state of the art". The projects are fun to build but perhaps more importantly, are relevant to the electronics scene in the new millenium. It is a great read in itself and far superior to cheap alternatives.



Qty 1+ Cat. BJ-8502 \$9.95

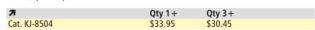
Short Circuits Project

The complete kit of parts available separately. This includes plastic baseboard, spring connectors and all components needed to complete every project in the book. No instructions are supplied with this kit as they come in the book which is available separately.



 Optional Solar Cell Power Supply for project #16 is extra Cat ZM-9020 (batteries are also extra)

• 6VDC (4 X AA)



Short Circuits Book and Project

Apart from the book, we supply the baseboard, plenty of spring terminals and ALL the components required to build every project in the book, INCLUDING the bonus projects!

- Additional Hookup wire can be purchased (WH-3025)
- Optional Solar Cell Power Supply for project #16 is extra Cat ZM-9020 (batteries are also extra)
- 6VDC (4 X AA)





7	Qty 1+	Qty 3+
Cat. KJ-8502	\$39.95	\$35.90



SHORT CIRCUITS VOLUME II

Once constructors have mastered the art of assembling a circuit with springs they will want to tackle projects that are more complex. The benefit of spring termination falls away once they get into projects that have over, say, 20 parts. In addition to this, projects that work on radio frequency, or RF for short, don't like springs as they start to act like little antennae all over the place! So it's time to graduate to the heart of modern electronics - the printed circuit board. This simple device fulfils the function of mounting board & circuit wiring in one. The critical element of success in printed circuit board - or PCB for short - assembly is good soldering. Soldering is not for 8 year olds but its fine if they are older or are under adult supervision. In Short Circuits II we teach the reader how to solder. We teach you a lot more as well, including:

Cat. BJ-8504 \$12.95

How to use a Multimeter**

- What tools will be needed.
- What sort of workspace is needed.
- How the circuit works (Tech talk).
- · What to do next.
- · How to make the circuit work in the real world.

TECH TIP

RELATED PRODUCT

A suitable 9V battery for all projects is our SB-2423 on page 368

SHORT CIRCUITS IS A LEARNING SYSTEM

A key part of the Short Circuits learning system is that the mind is stimulated into learning electronics by building exciting projects and HAVING FUN AT THE SAME TIME. Constructors will get a real "buzz" from the exciting projects offered - 22 in all. These projects have useful functions in the "real world" and they may choose to keep them for a long time because they are so useful. For example, constructors can make a Bionic Ear amplifier for a grandparent. Listed below are the projects in the book. They have all been designed by professional engineers and tested to work reliably. Maybe one day the constructor will be an engineer, designing projects for other people.

- Full colour 148 pages
- 205 x 275mm

Due to author's Copyright, instructions for each project are not included in the component pack. Constructors can purchase the book, or buy a set of instructions for each project separately.

TYPICAL TOOLS YOU WILL NEED

PERFECT FIRST METER

This is a full featured meter with plug-in

4mm probes AND transistor tester. This is the ideal first multimeter, and will give years

Low Cost DMM

- 19 Range
- 2000 Count
- Transistor test
- Diode Test
- 10A DC current
- · Ideal first meter
- Compact size

TECH TIP **ALL METERS** INCLUDE **QUALITY TEST LEADS**

of faithful service, in fact, you will only need to replace this meter if you require a unit with very high input impedance.

Specifications		20 .
Display	2000 count	2009
Security class	Cat II 500V	200
Basic DC accuracy	0.5%	2000a
DC voltage	200mV, 2V, 20V, 200V, 1000V (± 0.5%)	2000 °
AC voltage	200V, 750V (Max input 750V RMS) (± 1.2%)	(3)
DC current	200μA, 2mA, 20mA, 200mA, 10A (± 1.2%)	000
Resistance	200R, 2k, 20k, 200k, 2M (± 1.2%)	-
Ave/RMS	Ave	DIETECH
Input impedance	1M	Cat: QM-150
Special features	Transistor test	
Dimensions	125(H) x 68(W) x 23(D)mm	

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1500	\$9.95	\$8.75	\$7.75

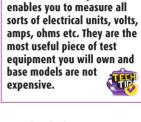
20/130W Soldering Iron Starter Kit

All the soldering essentials for the hobbyist. This kit represents excellent value, the best in soldering we've seen, anywhere. The sum of the individual parts amount to more than double the price we are selling this kit for.

Kit contains:

- 240V 20/130W Turbo soldering iron
- Spare tip
- Basic stand
- 1mm solder in dispenser tube
- · Metal solder sucker with spare tip and O-ring

7	Starter Kit	Cat.	Qty 1+	Qty 3+	Qty 6+
		TS-1651	\$24.95	\$22.35	\$19.70



**A Multimeter is just that. It



7	Cat.	Qty 1+	Qty 3+	Qty 6+	
	TH-1897	¢11 Q5	\$10.70	¢0 50	



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1887	\$11.95	\$10.70	\$9.50

6 Piece Insulated Electronic Screwdriver Set

These screwdrivers have ergonomic handles with excellent non-slip grips. The shafts are fully insulated and rated for 1000V. The set contains all the smaller sizes you need for working on electronic gear Storage case included

- Slotted: 2mm, 2.5mm, 3mm Phillips: #00, #0, #1
- 1000V rated TÜV and GS approved
 Case: 192(L) x 130(W) x 26(H)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2026	\$19.95	\$17.70	\$15.70



SHORT CIRCUITS II (CONTINUED)

SC2 Project - Red/Green Flasher

Here's a simple and easy-to-build first project. It flashes two LEDs (light emitting diodes) - one red and the other green - alternately, a bit like the light on a police car. A great way to learn how a 555 Timer IC works.

- PCB & all parts supplied
- Requires 9V battery
 Instructions NOT included.
- See KJ-8201 for individual instructions or full colour project hook BI-8504
- PCB: 43 x 30mm



7	Qty 1+	Qty 3+
Cat. KJ-8200	\$7.95	\$6.95
Instructions KJ-8201	\$2.50	
DECOMMENDED DOV	LIDE C . LID COAF	42.05

RECOMMENDED BOX - UB5 Cat. HB-6015 \$2.95 ea

SC2 Project - Countdown Timer

This neat project enables you to dial a time you want to elapse before you want something to happen, say the exposure of a camera shutter or an electrically operated door to stay open. At the end of the timed period (seconds to many minutes) a relay is energized which can switch something on or off. PCB and all parts supplied,

PROJECT

including relay. • Requires 9V battery.

 Instructions NOT included See KJ-8203 for individual

ы

instructions or full colour project book BJ-8504

• PCB: 61 x 47mm

7	Qty 1+	Qty 3+
Cat. KJ-8202	\$14.95	\$13.35
Instructions KJ-8203	\$2.50	
RECOMMENDED BOX - UB5	Cat. HB-6015	\$2.95 ea

SC2 Project - Hee-Haw Siren with Flashing Light

This project will make the noise made by emergency vehicles when they are trying to get through traffic. PCB and all parts supplied including flashing LED.



7	Qty 1+	Qty 3+
Cat. KJ-8204	\$9.95	\$8.75
Instructions KJ-8205	\$2.50	
RECOMMENDED BOX - UB5	Cat. HB-6015	\$2.95 ea

No, this unit won't fill a disco with blinding white light.

SC2 Project - Mini Strobe Light

Those things are dangerous and run straight

off 240V.This one runs off a 9V battery and

gives a surprisingly intense white light especially in darkness. Uses

state-of-the-art LED. PCB and parts including LED

Requires 9V battery.Instructions NOT

supplied.

included

SC2 Project - Touch Switch

This project allows you to turn things on or off simply by touching a small sensor pad with your finger. This could include operating an alarm, water pump, hi-fi speakers, or any other low voltage gadget.

PCBs & all parts including the relay supplied PROIECT Requires 9V battery
 Instructions NOT included. #5 See KJ-8209 for individual instructions or full colour project book BJ-8504. PCB: 75 x 26mm

7	Qty 1+	Qty 3+
Cat. KJ-8208	\$14.95	\$13.35
Instructions KJ-8209	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC2 Project - Drought Alarm

Well, not really a big drought. This will test the soil moisture of a favourite pot plant and an alarm will sound if the soil gets too dry.



7	Qty 1+	Qty 3+
Cat. KJ-8210	\$14.95	\$13.35
Instructions KJ-8211	\$2.50	

RECOMMENDED BOX - UB3 Cat. HB-6013 \$3.95 ea SC2 Project - Audio Level Display

Make your own fancy volume level display you see on DJ mixing desks where the columns of light dance up and down with the music. Connect it to the output of your CD, tape player or radio. Build two of them for displays on your stereo hi-fi system

PCB and all parts supplied Requires 9V battery (not included)
 Instructions NOT included.

See KJ-8213 for individual instructions or full colour project book BJ-8504

PCB: 75 x 26mm

7	Qty 1+	Qty 3+
Cat. KJ-8212	\$14.95	\$13.35
Instructions KJ-8213	\$2.50	
RECOMMENDED BOX - UB5	Cat. HB-6015	\$2.95 ea

SC2 Project - Electronic Organ

You can play simple tunes easily once you have built this project! The organ keyboard is actually part of the printed circuit board. It even has vibrato for extra realism.

Includes PCB and all board components. Requires 9V battery Instructions NOT included.

See KI-8215 for individual

book BJ-8504.

instructions or full colour project

PCBs: 133 x 31mm, 133 x 51mm

 See KJ-8207 for individual instructions or full colour project book BJ-8504.

PCB: 61 x 45mm

7	Qty 1+	Qty 3+
Cat. KJ-8206	\$18.95	\$16.95
Instructions KJ-8207	\$2.50	
DECOMMENDED DOV	LIDE C-+ LID CO1E	¢2.05

Otv 1+ Otv 3+ Cat. KJ-8214 \$22.95 Instructions KJ-8215 \$2.50 RECOMMENDED BOX - UB1 Cat. HB-6011 \$4.45 ea

PROJECT

#8

SC2 Project - No Brainer Amplifier

This amp is so easy to build, it's a no brainer! It will. however, give a powerful output to bring your MP3 player or sound card alive! Speaker supplied. Two required for stereo. PCB and all relevant parts included.



04 X 3/111111			
7	Qty 1+	Qty 3+	
Cat. KJ-8216	\$14.95	\$13.35	
Instructions KJ-8217	\$2.50		

RECOMMENDED BOX - UB3 Cat. HB-6013 \$3.95 ea

SC2 Project - Beam Me **Up Scotty Simple Intercom**

This project enables you to talk (i.e. not shout) between parts of a house, or a house and a garage. You can even leave it on, say in the kitchen to monitor a baby's room. All parts supplied including PCB and 6-metres of connecting wire. Requires 9V battery.

PROIECT

#10



PCB: 63 x 57mm

7	Qty 1+	Qty 3+
Cat. KJ-8218	\$23.95	\$21.35
Instructions KJ-8219	\$2.50	
RECOMMENDED BOX - UB3 x 2	Cat. HB-6013	\$3.95 ea

SC2 Project - Skeet Shoot Game

Here's a fun way to test your hand-eye coordination. The game sends a burst-of-light 'skeet' up along a string of ten LEDs, and you have to try to 'hit' it by pressing the FIRE button at exactly the same time as it reaches the red LED at the end.

- Instructions NOT included.
- See KJ-8211 for individual instructions or full colour project book BJ-8504
- PCB, LEDs and components



PROJECT



7	Qty 1+	Qty 3+
Cat. KJ-8220	\$17.95	\$15.95
Instructions KJ-8221	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC2 Project - Simple FM Bug

Small portable FM microphone Works surprisingly well. Use it as a baby minder/monitor as well. PCB and all parts supplied.

- Requires 9V battery. Instructions NOT included.
 - See KJ-8231 for individual instructions or full colour PROIECT project book BJ-8504. PCB: 59 x 41mm

7	Qty 1+	Qty 3+
Cat. KJ-8230	\$14.95	\$13.35
Instructions KJ-8231	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

#12

www.iavcar.com.au

Freecall order hotline: 1800 022 888

PROIECT

#4

SHORT CIRCUITS II (CONTINUED)

SC2 Project -Metronome

This neat little metronome does everything that a traditional metronome

It produces an adjustable tick' sound to help you play your music at just the right tempo. It also flashes a LED once per bar, to help you get the music's rhythm right as well.

- · PCB, speaker and all parts supplied including knobs.
- Requires 9V battery
 Instructions NOT included.
- See KJ-8233 for individual instructions or full colour project book BJ-8504.
 • PCB: 82 x 82mm

7		Qty 1+	Qty 3+
Cat.	KJ-8232	\$18.95	\$16.95
Inst	ructions KJ-8233	\$2.50	
REC	OMMENDED BOY - LIB1	Cat HR-6011	\$1.15.00

SC2 Project - Jiminy! What's That Cricket Noise?

This fun project makes the distinct sound of a cricket when triggered by a hidden microphone. Someone walks into a room, says something and the next thing this loud cricket starts to chirp! Hours of fun. PCB and all other parts including microphone supplied.



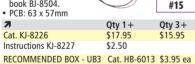
71	Qty 1+	Qty 3+
Cat. KJ-8224	\$14.95	\$13.35
Instructions KJ-8225	\$2.50	

RECOMMENDED BOX - UB3 Cat. HB-6013 \$3.95 ea

SC2 Project - Bionic Ear

This project enables you to listen to a conversation (or a bird in a tree, etc) beyond what you would normally hear. It uses the principle of a directional microphone PCB and parts supplied. A plastic bowl or similar is required for the reflector.

- Requires 9V battery Instructions NOT
- included. See KI-8227 for individual
- instructions or full colour project book BJ-8504



PROIECT

#16

SC2 Project - Casino! Electronic Dice

Well dice is really plural and this is just one dice a die. At the press of a button roll 6 light emitting diodes flash briefly and only one stays lit, representing a number between 1 and 6. Truly, truly random and never rolls off the table! PCB and all PROJECT parts supplied.

- Requires 9V battery.
- Instructions NOT included.
 See KJ-8223 for individual instructions or full colour
- project book BJ-8504. • PCB: 108 x 51mm

1 CD1 100 X D 1111111				
	7	Qty 1+	Qty 3+	
	Cat. KJ-8222	\$14.95	\$13.35	
	Instructions KJ-8223	\$2.50		
	RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea	

SC2 Project - Sound Like a Dalek

This project will change your voice into that metallic sounding robot voice so familiar in the space adventure movies. PCB and parts supplied.

Connect it to the no brainer amp and get really scary!

PROJECT

#13



See KJ-8229 for individual instructions or full colour project book BJ-8504.

PROJECT #17

PROIECT

#18

PROJECT

#20

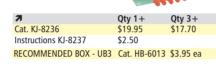
• PCB: 102 x 57mm

7	Qty 1+	Qty 3+
Cat. KJ-8228	\$23.95	\$21.35
Instructions KJ-8229	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC2 Project - Knight Rider Light Scanner

Now you can make the light scanner that goes on the bonnet of that famous car. Looks fantastic in all sorts of places! PCB and all parts supplied

- Requires 9V battery.
- Instructions NOT included.
 See KJ-8237 for individual instructions or full colour
- project book BJ-8504. PCB: 102 x 55mm



SC2 Project - Event counter, 0 to 999

This project demonstrates how 3-digit counters work and can be used for real-world counting jobs, like counting laps on a slot car set, etc. An excellent 'hands on' introduction to electronics.

PCB and all parts suppliedRequires 9V battery

Instructions NOT

included. See KJ-8235 for instructions or full colour project book BJ-8504

PCB: 127 x 76mm

7	Qty 1	+	Qty 3+
Cat. KJ-8234	\$23.9	5	\$21.35
Instructions KJ-8235	\$2.50		
DECOMMARNIDED DOV	LID1 C-+ I	ID CO11	¢ 4 4 F

SC2 Project - FM Radio with Electronic Tuning

This is a true state-of-the-art 88-108MHz FM radio with electronic station tuning and powerful amplifier included! It has a voltage regulated power supply and works really well. Your friends wont believe you built it. PCB and all board parts supplied.

- Requires 9V battery.
- Instructions NOT included.
- See KJ-8239 for individual instructions or full colour project bo BI-8504
- PCB: 108 x 51mm

ok		
	SC2	
	PROJECT	
	#21	

7	Qty 1+	Qty 3+
Cat. KJ-8238	\$34.95	\$31.45
Instructions KJ-8239	\$2.50	
RECOMMENDED BOX	Cat. HB-6032	\$7.95 ea

SC2 Project - Three Stage FM **Transmitter**

So stable it could be used as a small radio station. The audience will be limited to the backyard as there are rules about such things. A microphone is included.







7	Qty 1+	Qty 3+
Cat. KJ-8750	\$23.95	\$21.35
RECOMMENDED BOX - UB5	Cat. HB-6015	\$2.95 ea

Due to author's Copyright, instructions for each project are not included in the component pack. Constructors can purchase the book, or buy a set of instructions for each

project separately.

RECOMMENDED BOX - UB1 Cat. HB-6011 \$4.45 ea

Short Circuits - Volume II

Once constructors have the basic skills and knowledge either from a School Design and Technology course, or tackling Short Circuits Vol 1, they can now have some real fun! With this book (and associated project packs available separately - see following pages) they can make such things as a mini strobe light, police siren, mini organ, a couple of powerful radio transmitters, an FM radio - even a 'Knight Rider' scanner!!

All components are fully described and explained, along with tutorials on soldering iron and multimeter use. All projects are safe and battery powered.

- Soft cover full colour 148 pages
- Dimensions: 205(W) x 275(H)mm









SHORT CIRCUITS VOLUME III

Like our Volumes 1 & 2 book, Short Circuits Volume 3 is sold independently to each of the 30-odd projects. Some of the projects constructors will build include a Guitar Sustain Unit, a Universal Timer, Car Alarm, Two Lamp Flasher plus many more! There's even a project that demonstrates how constructors can use your computer to interface to the realworld via a computer's parallel port. Building the projects described in Volume 3 will provide constructors with the confidence needed to tackle more complex projects, such as those described in the various electronics hobby magazines.

*Instructions to build all the projects are in the book or constructors may purchase individual instructions at a small charge due to copyright costs.

 Book: Cat. BJ-8505, \$14.95

128 Pages

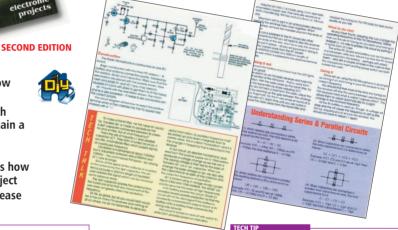
Full Colour. 205x275mm

Due to author's Copyright, instructions for each project are not included in the component pack. Constructors can purchase the book, or buy a set of instructions for each project separately. (We have negotiated a lower price for these.)



- · Techtalk explains the operation of each circuit in detail, to help constructors gain a thorough knowledge of the "Building Blocks" used in circuit design
- "What To Do Next" shows constructors how to modify or further improve your project
- · Basic circuit theory is provided to increase constructors level of understanding

Instructions to build all the projects are in the book ie. constructors will need the book to build the projects if constructors don't buy the instructions separately.



NOTE: Short Circuits 3 kits don't contain batteries. We would rather see constructors use a fresh battery once the project is completed.

SC3 Project -

BOD

Dasher Flasher for Cars A really low cost way to deter thieves from breaking into your car. This lamp flasher mounts on your car dashboard and starts flashing when the ignition is off. Looks like the real thing. Kit includes PCB, lamp and all components.

SC3 Project - Ding Dong

PCB, speaker and all components. 12VDC power required.

PCR: 47 x 41mm

Door Bell

Another useful little kit

Ding Dong door bell.

Just the thing for your

front door. Kit includes

• PCB: 105 x 60mm

Instructions KJ-8053

that generates the

sound of a classic

PROIECT #1

\$12.95

\$2.50

RECOMMENDED BOX - UB3 Cat. HB-6013 \$3.95 ea

7	Qty 1+	Qty 3+
Cat. KJ-8050	\$9.95	\$8.75
Instructions KJ-8051	\$2.50	
RECOMMENDED BOX - UB5	Cat. HB-6015	\$2.95 ea

SC3 Project - Electronic Eve

Install this kit to monitor traffic on a path or through a doorway. When a person or object breaks the beam the loudspeaker will

sound. Kit includes PCB, LDR, speaker and all components. 12VDC nower required

• PCB: 105 x 61mm



**	Qty I T	QLy J T
Cat. KJ-8054	\$14.95	\$13.35
Instructions KJ-8055	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

Track moving objects, find the dog when it runs away or even recover your stolen goods using an FM radio. This kit transmits a tone over the FM band so that you can

Qty 1+ Qty3+ Cat. KJ-8056 \$14.95 \$13.35 Instructions KJ-8057 \$2.50

SC3 Project - Simple FM Alarm

PCB, 9V battery and all electronic components. A fun & useful project. **PROJECT** • PCB: 105 x 60mm #4

RECOMMENDED BOX - UB3 Cat. HB-6013 \$3.95 ea

SC3 Project - Infrared Remote Link

This can be used as a remote on/off or momentary switch.

Kit includes PCBs, 9V battery and all

electronic components. Receiver requires 12VDC

PCBs: 105 x 60mm

DC power.	A STATE OF
SC3	
PROJECT #5	1
πο	

Qty 3+ Cat. KJ-8058 \$28.95 Instructions KJ-8059 \$2.50 RECOMMENDED BOX - UB3 X 2 Cat. HB-6013 \$3.95 ea

SC3 Project -

Simple Intruder Alarm This simple design features a normally open

and normally closed input, 40 second siren duration and triggered LED indication.



Kit includes PCB, buzzer & electronic components 12VDC power required

PCB: 105 x 60mm			
7	Qty 1+	Qty 3+	
Cat. KJ-8060	\$14.95	\$13.35	

2 Instructions KJ-8061 \$2.50 RECOMMENDED BOX - UB3 Cat. HB-6013 \$3.95 ea

Cat. KJ-8052

PROJECT

\$11.35

SHORT CIRCUITS III PROJECTS

SC3 Project - Screamer Car Alarm



A more sophisticated alarm including entry/exit delay, flashing deterrent light, soft warning alarm and deafening internal siren. Thieves will make a hasty retreat!

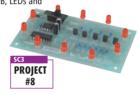
- Kit includes PCB, siren and electronic components.
 PCB: 132 x 88mm

7	Qty 1+	Qty 3+
Cat. KJ-8062	\$32.95	\$29.45
Instructions KJ-8063	\$2.50	
RECOMMENDED BOX - UB2	Cat. HB-6012	\$6.95 ea

SC3 Project - Light Chase

Dazzling display using 10 LEDs that appear to chase each other. Build for a shop, theatre or advertising display

- Kit includes PCB, LEDs and electronic components.
- 12VDC power
- required.
 PCB: 105 x 60mm



7	Qty 1+	Qty 3+
Cat. KJ-8064	\$12.95	\$11.35
Instructions KJ-8065	\$2.50	
DECOMMENDED DOV. I	ID2 Cat UD CO12	\$2.0E.02

SC3 Project -Two Lamp Flasher

Alternate flashing halogen lamps with an adjustable flash rate between 1 to 4 seconds.

- Kit includes PCB, two halogen lamps with bases and all electronic components
- 12VAC required use MP-3044



7	Qty 1+	Qty 3+
Cat. KJ-8070	\$29.95	\$26.90
Instructions KJ-8071	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

PROIECT

#11

PROJECT

#12

SC3 Project -The Champ Amplifier

A cheap and handy amplifier that can improve low-level signal sources so they can be heard on headphones or á speaker.



• 12VDC power required. • PCB: 105 x 60mm

7	Qty 1+	Qty 3+
Cat. KJ-8072	\$14.95	\$13.35
Instructions KJ-8073	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC3 Project -Simple FM Microphone

This FM transmitter has many possible uses including baby room monitor, wireless microphone or spy bug. It can be picked up on any FM radio.

PROIECT

#14





7	Qty 1+	Qty 3+
Cat. KJ-8078	\$12.95	\$11.35
Instructions KJ-8079	\$2.50	
RECOMMENDED BOX - UB5	Cat. HB-6015	\$2.95 ea

SC3 Project -Mini-mitter FM Transmitter

Transmit stereo audio from your tape deck or CD player to any FM radio elsewhere in your house. You could even tune in on a portable walkabout radio.



7	Qty 1+	Qty 3+
Cat. KJ-8114	\$23.95	\$21.35
Instructions KJ-8115	\$2.50	
DECOMMENDED DOV	LIDO Cat UD CO10	¢2 0E 02

SC3 Project - Light Scanner / Chaser

An impressive display using 20 LEDs that chase forward and backward - just like scanners seen in space movies.

- Kit includes PCB, LEDs & all electronic components
- 12VDC power required.
- PCB: 105 x 60mm



7	Qty 1+	Qty 3+
Cat. KJ-8066	\$16.95	\$14.95
Instructions KJ-8067	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC3 Project -**Universal Stereo Preamplifier**

If the input signal to your amplifier is not sufficient you will need a preamplifier such as this one to boost the signal.



12VDC power





Cat. KJ-8074 Instructions KJ-8075 \$2.50 RECOMMENDED BOX - UB3 Cat. HB-6013 \$3.95 ea

SC3 Project -Low-cost Intercom System

A low-cost method of communicating between two rooms. The remote unit is hands free so ites also great as a baby monitor.



7	Qty 1+	Qty 3+
Cat. KJ-8080	\$15.95	\$14.35
Instructions KJ-8081	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC3 Project -**Really Bright Flasher**

Attract attention with this bright halogen light flasher. The flash rate can be adjusted between 0.5 to 3.5 seconds.

- Kit includes PCB, 12V halogen lamp with base and all electronic components.



7	Qty 1+	Qty 3+
Cat. KJ-8068	\$24.95	\$22.35
Instructions KJ-8069	\$2.50	
RECOMMENDED BOX - LIB3	Cat HR-6013	\$3.95 ea

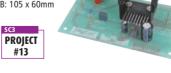
SC3 Project -High Power 12V Amplifier

This amplifier-on-a-chip can deliver about 13.5-watts into a 4-ohm speaker. That's quite loud!

· Kit includes PCB, amplifier IC, heatsink

and all electronic components Speaker and 12VDC power required.
• PCB: 105 x 60mm





7	Qty 1+	Qty 3+
Cat. KJ-8076	\$23.95	\$21.35
Instructions KJ-8077	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC3 Project -VOX - Sound Switch

This sound-activated switch closes a relay when a loud-enough sound is heard. It switches off when the sound stops. Ideal for radio transmitters or surveillance applications.

 Kit includes PCB, relay, electret mic & electronic components

12VDC required

PCB: 105 x



7	Oty 1 I	Otu 2 :	
7)	Qty 1+	Qty 3+	
Cat. KJ-8084	\$14.95	\$13.35	
Instructions KJ-8085	\$2.50		
RECOMMENDED BOX - LIB3	Cat HR-6013	\$3.95.62	

SHORT CIRCUITS III PROJECTS

SC3 Project - Train Sound FX

Authentic sounding train whistle and horn sound effects for your model railway



• 12VDC power required

• PCB: 160 x 103mm



7	Qty 1+	Qty 3+
Cat. KJ-8086	\$27.95	\$24.95
Instructions KJ-8087	\$2.50	

RECOMMENDED BOX - UB2 Cat. HB-6012 \$6.95 ea

SC3 Project - Guitar Practice Amplifier

This low cost amplifier allows you to practice your guitar without annoying the neighbours. It has a guitar type input socket, small speaker and volume.

 Kit supplied with PCB, speaker. socket and electronic components

12VDC power required.

PCB: 105 x 60mm

G

SC3
PROIECT
#22

7	Qty 1+	Qty 3+
Cat. KJ-8092	\$16.95	\$14.95
Instructions KJ-8093	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC3 Project -**Guitar Sustain Unit**

Add this sustain unit to your guitar to make it sound more fulfilling. Features adjustable Decay and Attack.

• Kit supplied with PCB, 6.5mm sockets and electronic components



<i>n</i>	Qty I+	Qty 3+
Cat. KJ-8100	\$23.95	\$21.35
Instructions KJ-8101	\$2.50	
RECOMMENDED BOX - LIB3	Cat HR-6013	\$3.95 ea

SC3 Project -**Guitar Distortion Unit**

Distortion is popular to many guitarists. It can make the music sound quite different. Project includes PCB, 6.5mm sockets and electrical components



7	Qty 1+	Qty 3+
Cat. KJ-8102	\$16.95	\$14.95
Instructions KJ-8103	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC3 Project -Regulated +12V Power Supply

Many of the Short Circuits 3 projects require 12VDC power. Using our plugpack (MP-3055), this low cost power supply is ideal to power these projects.

Kit supplied with PCB, 12V regulator and electronic components



II ZUR		0
7	Qty 1+	Qty 3+
Cat. KJ-8104	\$12.95	\$11.35
Instructions KJ-8105	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

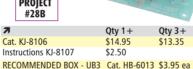
SC3 Project -Regulated +/- 12V Power Supply

Some applications need a positive and negative supply. This circuit will supply a +12V and -12V rail.

Kit supplied with PCB, 12V regulators and electronic components. Requires plugpac

MP-3055 PCR:





SC3 Project -**Universal Timer**

This timer is adjustable between 1-second to 3.5minutes. An LED illuminates during the timing period and a buzzer sounds at the end.



PROJECT #29 Qty 3+ Cat. KJ-8108 \$16.95 \$14.95 Instructions KJ-8109 \$2.50

RECOMMENDED BOX - UB3 Cat. HB-6013 \$3.95 ea

SC3 Project -**Waveform Generator**

This low-cost signal generator produces adjustable square and triangular waves between 100Hz-20kHz Ideal for testing, troubleshooting and developing circuits

Kit supplied with PCB and electronic components.

12VDC power required. PCB: 105 x 60mm

Qty3+ Qty 1+ Cat. KJ-8110 Instructions KJ-8111 \$2.50

PROJECT

#30

RECOMMENDED BOX - UB3 Cat. HB-6013 \$3.95 ea **PCB Holder with Magnifying Glass**

Any time you need that extra bit of help with your PCB assembly, this pair of helping hands will get you out of trouble. With a 90mm magnifying glass, it also provides an extra pair of eyes. Infinitely adjustable for height and any working angle you may need. The two alligator clips provide secure support for boards as small as 32mm wide. Mainly intended for

PCB assembly, this handy tool can be adapted for countless other uses in the workshop or around the house

• 3 x Magnification

• Dimensions: Base: 78 x 98mm Height: 145mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1983	\$12.95	\$11.35	\$10.35

ELECTRONIC PROJECT KITS FOR KIDS

Educational FM Radio Kit for Kids

This kit allows kids to build their very own FM radio! Inside the kit are all the components required to assemble a working FM radio receiver and no soldering is required. Just coil the

connecting wires around each connection point and away you go Once completed they can sit back and marvel at their creation and listen to their favourite channel.

- · Requires the use of longnosed pliers (TH-1877) and small wire cutters (TH-1897) or similar tools

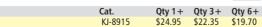




Freecall order hotline: 1800 022 888





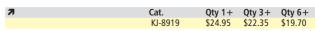


12 in 1 Electrical Experiment Kit

12 different experiments to construct that demonstrate various electronic principles. Learn about static electricity, electric motors, resistors, diodes, lights, solar power and more. Kit included a manual with excellent information describing the theory and history associated with each experiment

Activities

- Static ElectricityConductors and insulators
- Make a fan
- Resistor
- Diode
- Make a light
- · Make a Morse code machine Light control alarm
- Make a bell Make an electromagnet
- Make a motor
- · Solar power cell
- Assembly time for each experiment: Approximately 10 mins Requires 2 x AA batteries
- Recommended for ages 8-Base dimensions: 120(L) x 99(W) x 23(H)mm



Dur Heroes

What follows is a brief list of some of the notable people who made the world what it is today. There are many other historical figures, of course, but this list focuses on notable scientific and technology achievers.

The list is no means exhaustive, and indeed there should be a lot more names from the 20th Century, like, say Glenn Seaborg.

PLATO, ARISTOTLE, EUCLID, ARCHIMEDES, ZHANG HENG.

Here we go:

PTOLEMY, JOHANNES GUTENBERG, LEONARDO DA VINCI,
NICOLAUS COPERNICUS, FRANCES BACON, GALLILEO GALILEI, JOHANNES KEPLER,
RENE DESCARTES, BLAISE PASCAL, CHRISTIAAN HUYGENS, ANTON VAN LEEUWENHOEK,
SIR ISAAC NEWTON, EDMUND HALLEY, GEORG SIMON OHM, THOMAS NEWCOMEN,
SAMUEL F.B. MORSE, HENRY CAVENDISH, JOSEPH PRIESTLEY, JAMES WATT, ANTOINE
LAVOISIER, COUNT ALESSANDRO VOLTA, JOHN DALTON, ANDRE-MARIE AMPERE, CHARLES
BABBAGE, HUMPHREY DAVY, MICHAEL FARADAY, DMITRI MENDELEEV, JAMES PRESCOTT
JOULE, CHARLES DARWIN, LOUIS PASTEUR, JOHANN GREGOR MENDEL, WILLIAM
THOMPSON, LORD KELVIN, JAMES CLERK MAXWELL, ALFRED NOBEL, WILHELM KONRAD
ROENTGEN, SAMUEL MORSE, THOMAS ALVA EDISON, ALEXANDER GRAHAM BELL, JOHN
AMBROSE FLEMING, ROBERT BUNSEN, NIKOLA TESLA, SIR JOHN JOSEPH THOMSON,
HEINRICH RUDOLF HERTZ, MAX PLANCK, GUSTAV ROBERT KIRCHHOFF, MARIE SKLODOSKA
CURIE, ERNEST RUTHERFORD, THE WRIGHT BROTHERS, LISE MEITNER, GUGLIELMO
MARCONI, ALBERT EINSTEIN, ROBERT H. GODDARD, ALEXANDER FLEMING, NIELS BOHR,
EDWIN POWELL HUBBLE, ERWIN SCHRÖDINGER, ROBERT ALEXANDER WATSON-WATT.

Don't know some of these people? Why not look them up and find out what they did. You will be amazed.

ARTHUR HOLLY COMPTON, LINUS CARL PAULING, ENRICO FERMI, WERNER HEISENBERG,

John Bardeen, William Bradford Shockley, Robert Oppenheimer, Sir Frank Whittle, Hans von O'Hain, Alan Turing, Richard Philipis Feynman, Stephen William Hawking, Tim Berners-Lee, Howard W. Armstrong, Vladimir Zworykin and of course the 1991 French Nobel Laureate, Pierre-Gille de Gennes, the Brilliant mind behind the technology used in Liquid Crystal Displays (LCDs).

TRUE AUSSIE HERO!!!

Still Walking Book by Bill Moss AM

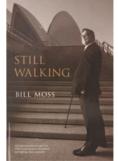
Bill Moss was one of the people who justified the term "The Millionaire Factory" at Macquarie Bank in the first decade of this century. This book is his story. It is a fantastic read. He built up the real estate division from scratch and along the way did some amazing things. There are some incredible stories about people as well which are very revealing - Kerry Packer for one! As the same time Bill was suffering from a severe form of a degenerative and incurable form of muscular dystrophy called FSHD. He did not let this affliction stop him. He left Macquarie with branches in 5 continents and thousands of employees. This book is an inspiration and is a must read for anyone who loves to know about a true Aussie hero. All proceeds from the book go to research into a cure (and there is no reason why ultimately this should not happen) for this disease. Jaycar does not normally sell mainstream books like this but it is such a special book we are making an exception.

Soft cover, 226 pages230 x 150mm

SPECIAL OFFER: Purchase over \$500 from Jaycar and we will give you a copy of this book for \$10. You must ask for the offer, as our staff has too much other stuff to remember already! Offer only available while stocks last.

7 Cat. Qty 1+ BC-1000 \$39.95







Light Emitting Diodes – LEDs

STANDARD LEDS

Viewing Angle	Is the complete angle where the luminous intensity is half the on-axis intensity.
Wavelength	Dominant Wavelength of the light emitted in nm (nanometers). This determines the colour of the LED.
IF Typical	Continuous forward current in mA to obtain typical optical characteristics.
VF Typical	Continuous forward voltage in Volts to obtain typical optical characteristics.
IF Max	Maximum continuous forward current in mA at 25°C.
VDD Typical	Operating voltage to obtain typical optical characteristics.
VDD Max	Absolute maximum supply voltage at 25°C.
IV Typical	Light emitted from the LED is quantified by a single point, ie the on-axis Luminous Intensity value in mcd (millicandela) at IF Typical.



- Luminous intensity (IV) does not represent total light output from an LED. Both the luminous intensity and the spatial radiation pattern (viewing angle) must be taken into account.
 If two LEDs have the same luminous intensity value, the lamp with the larger viewing angle will have the higher total light output.
 Maximum luminous intensity can be achieved by operating the LED in pulsed mode, or maximum continuous forward current.

3mm LEDs

3mm	LEDS														
				nd Electronic Characterist				Max Continuous							
Size	Viewing Angle	Colour	Lens	Wavelength, Chromati		VF Typical		IF Max		tor (ohi					
(mm)	(Degrees)			Co-ord (nm), (Co-ordinat		(V)	(mcd)	(mA)			12VDC				Qty 25+
3	45	Red	Diffused	650	15	2.3	40	15	180	470	680	ZD-0100		\$0.18	\$0.14
3	15	Red	Waterclear	660	20	1.8	1500	30	160	360	510	ZD-0102 ZD-0104		\$0.52	\$0.40
3	20 15	Red	Waterclear Waterclear	625 625	20 20	2.0	2100 7000	50 30	150 150	360 360	510 510	ZD-0104 ZD-0106		\$1.10 \$3.30	\$0.85
3	45	Red	Diffused	625	20	1.9	35	30	160	360	510			\$0.22	\$2.60 \$0.17
3	50	Yellow	Diffused	585	20	2.1	10	20	150	360	510	ZD-0119		\$0.22	\$0.17
3	20	Yellow	Waterclear	588	20	2.0	3000	50	150	360	510	ZD-0112		\$1.35	\$1.05
3	15	Yellow	Waterclear	588	20	2.2	6500	50	150	360	510	ZD-0114		\$3.15	\$2.45
3	50	Green	Diffused	573	20	2.3	40	20	130	330	470	ZD-0120		\$0.18	\$0.14
3	20	Green	Waterclear	568	20	2.1	500	30	150	360	510	ZD-0122	\$1.25	\$1.10	\$0.85
3	20	Green	Waterclear	520	20	3.2	6000	20	91	300	470	ZD-0124	\$5.95	\$5.25	\$4.15
3	15	Aqua	Waterclear	505	20	3.5	4000	30	75	270	430	ZD-0126		\$4.45	\$3.45
3	15	Blue	Waterclear	465	20	3.3	1500	20	82	300	430	ZD-0130		\$2.15	\$1.70
3	15	Blue	Waterclear	470	20	3.2	3700	30	91	300	430	ZD-0132		\$4.90	\$3.75
3	15 20	White	Waterclear	0.31/0.32	20 20	3.2 3.2	1000 5000	20 30	91	300	430	ZD-0140		\$2.15	\$1.70
3	15	White White	Waterclear Waterclear	0.31/0.32 0.31/0.32 Cree		3.4	12000	25	91 62	220	430 360	ZD-0142 ZD-0298		\$3.05 \$3.95	\$2.30 \$2.95
		vviiite	waterciear	0.51/0.52 CIEC	- 25	J.4	12000	23	02	220	300	20-0230	J4.4J	\$3.33	\$2.33
5mm	ı LEDs														
5	50	Red	Diffused	700	20	2.3	8	30	130	330	470	ZD-0150	\$0.25	\$0.22	\$0.17
5	15	Red	Waterclear	660	20	1.7	500	30	160	360	510	ZD-0152		\$0.57	\$0.45
5	15	Red	Waterclear	625	20	2.0	4000	50	150	360	510	ZD-0154		\$1.10	\$0.85
5	15	Red	Waterclear	625	20	2.1	10000	50	150	360	510	ZD-0156		\$2.60	\$1.95
5	15	Red	Waterclear	624 Cree		2.1	23500	30	100	240	330	ZD-0293		\$4.45	\$3.45
5	8	Red	Waterclear	616	50	2.1	35000	50	62	150	200	ZD-1790		\$3.45	\$2.75
5	15	Red	Waterclear	625	50	2.2	35000	70	56	150	200		\$4.95	\$4.45	\$3.45
5	40 50	Yellow	Diffused Diffused	635 585	20 20	2.0	10	30 30	150 150	360 360	510 510	ZD-0169 ZD-0160	\$0.25	\$0.22 \$0.22	\$0.17 \$0.17
5	15	Yellow	Waterclear	585 590	20	2.1	2500	20	150	360	510	ZD-0160 ZD-0162		\$1.10	\$0.17
5	15	Yellow	Waterclear	588	20	2.2	5200	50	150	360	510	ZD-0162		\$1.35	\$1.05
5	15	Yellow	Waterclear	588	20	2.3	10500	50	130	330	470	ZD-0166		\$3.30	\$2.60
5	15	Yellow	Waterclear	591 Cree		2.1	23500	30	100	230	330	ZD-0295	\$4.95	\$4.45	\$3.45
5	50	Green	Diffused	570	20	2.3	10	30	130	330	470	ZD-0170		\$0.22	\$0.17
5	30	Green	Waterclear	525	20	3.5	7500	30	75	270	430	ZD-0172		\$1.75	\$1.35
5	15	Green	Waterclear	515	20	3.5	8500	30	75	270	430	ZD-0174		\$3.30	\$2.60
5	20	Green	Waterclear	525	20	3.2	12000	20	91	300	430	ZD-0176		\$4.45	\$3.45
5	15	Green	Waterclear	525	50	3.3	60000	50	36	120	180	ZD-0282		\$5.25	\$4.15
5 5	15 15	Green	Waterclear Waterclear	527 Cree 505	2® 30 20	3.2 3.5	64600 8500	30 30	62 75	200 270	300 430	ZD-0292 ZD-0178		\$5.25 \$3.45	\$4.15 \$2.75
5	40	Aqua Blue	Diffused	470	20	3.3	350	30	82	300	430	ZD-0178		\$1.75	\$1.35
5	15	Blue	Waterclear	468	20	3.2	2500	30	91	300	430	ZD-0180		\$2.15	\$1.70
5	15	Blue	Waterclear	470	20	3.2	4850	30	91	300	430	ZD-0182		\$3.45	\$2.75
5	15	Blue	Waterclear	470	50	3.3	18000	50	36	120	180	ZD-0281	\$4.95	\$4.45	\$3.45
5	15	Blue	Waterclear	470 Cree	e® 30	3.2	23500	30	62	200	300	ZD-0291	\$4.95	\$4.45	\$3.45
5	30	White	Waterclear	0.31/0.31	20	3.2	4000	30	91	300	430	ZD-0190		\$2.15	\$1.70
5	20	White	Waterclear	0.31/0.32	20	3.2	10000	30	91	300	430	ZD-0192		\$3.05	\$2.30
5	15	White	Waterclear	0.31/0.32	20	3.3	18000	30	82	300	430	ZD-0195		\$4.45	\$3.45
5	15 15	White	Waterclear	0.31/0.33	.® 20	3.3	40000	50	36	120	180	ZD-0280 ZD-0290		\$5.25 \$5.25	\$4.15 \$4.15
5	15 30	White UV	Waterclear Waterclear	0.29/0.29 Cree 405	® 30 20	3.2 3.3	45000 60	30 20	62 91	200 300	300 430	ZD-0290 ZD-0260		\$4.45	\$4.15 \$3.45
_		JV	vvatertieal	403	20	3.3	00	20	31	300	430	20 0200	φ Τ. 33	υ τ.τυ	ψ 5. 5
10mi	m LEDs														
10	16	Red	Diffused	635	20	2.0	100	20	150	360	510	ZD-0200	\$0.55	\$0.47	\$0.37
10	30	Red	Waterclear	625	20	2.0	2000	50 50	150	360	510	ZD-0200 ZD-0201		\$1.10	\$0.85
10	30	Red	Waterclear	625	20	2.0	4500	50	150	360	510	ZD-0201		\$2.15	\$1.70
10	20		Waterclear	610	20	2.4	9000	50	130	330	470	ZD-0225		\$2.60	\$1.95
10	35		Diffused	585	20	2.0	63	30	150	360	510	ZD-0210		\$0.47	\$0.37
10	30		Waterclear	588	20	2.0	4000	50	150	350	510	ZD-0211	\$1.25	\$1.10	\$0.85
10	30	Yellow	Waterclear	588	20	2.2	4500	50	150	360	510	ZD-0212		\$2.15	\$1.70
10	50	Green	Diffused	570	20	2.2	100	20	150	360	510	ZD-0205		\$0.47	\$0.37
10	30	Green	Waterclear	525	20	3.1	13000	20	100	300	430	ZD-0206		\$3.30	\$2.60
10	30	Blue	Waterclear	470	20	3.5	1200	30	75	270	430	ZD-0215		\$3.05	\$2.30
10	30	White	Waterclear	0.25/0.26	20	3.2	5000	30	91	300	430	ZD-0220	\$3.45	\$3.05	\$2.30
5 x 2	mm Recta	ngula	r LEDs												
5 x 2	155	Red	Diffused	643	20	2.3	5	20	130	330	470	ZD-0230	\$0.40	\$0.35	\$0.27
5 x 2	155		Diffused	590	20	1.9	10	20	160	360	510	ZD-0234	\$0.40	\$0.35	\$0.27
5 x 2	155	Green	Diffused	573	20	2.3	15	20	130	330	470	ZD-0232	\$0.40	\$0.35	\$0.27
3mm	n Superflux	(
	erflux 90	White	Waterclear	0.29/0.29 Cree®	35	3.6	3000	35	43	160	240	ZD-0020	\$5.95	\$5.25	\$4.15
o supe	EI IIUX 30	wille	vvatertiedf	0.23/0.23 Cree®	33	5.0	3000	33	43	100	240	20 0020	رو.رپ	43.23	ψT.1J

Freecall order hotline: 1800 022 888

LEOs & Accessories

ы	LED	S																
	Size	Viewing Angle	Colour	Lens	Optical and Electronic Wavelength, Chromatic		istics I VF Typical		max continuous		ed Valu	es Series ms) for						
	(mm)			20	Co-ord (nm), (Co-ordinates)		(V)	(mcd)	(mA)			12VDC	Cat.	Qty 1+	Qty 10+	Qty 25+		
Bi	3	65	Red	Diffused	605	20	2.1	1.3	30	150	360	510	ZD-0248	\$0.95	\$0.85	\$0.65		
Di	٥	65	Green	Diffused	570	20	2.3	1.5	30	150	300	310	ZD-0246	\$0.55	\$0.03	\$0.05		
Bi	5	90		Diffused	625	20	2.1	7.6	30	150	360	260	360	360 510	ZD-0250	\$0.95	\$0.85	\$0.65
Di	J	90		Diffused	567	20	2.2	10	30	150	300	310	ZD-0230	\$0.55	\$0.05	\$0.05		
Bi	10	75		Diffused	625	20	2.0	10	30	150	360	510	ZD-0255	\$1.25	\$1.10	\$0.85		
Di	10	75		Diffused	570	20	2.1	10	30	150	300	310	ZD-0233	¥1.23	\$1.10	\$0.05		
Bi	3	75			625	20	2.0	4.5	30	150	360	510	ZD-0249	\$0.95	\$0.85	\$0.65		
Di	3	75		Diffused	570	20	2.1	6	30	150	300	310	ZD-0243	\$0.95	\$0.05	\$0.03		
Bi	5	90	Orange	Diffused	625	20	2.1	70	30	150	360	510	ZD-0252	\$1.00	\$0.90	\$0.70		
ы	3	90	Green	Diffused	568	20	2.2	80	30	150	300	310	ZD-0232	\$1.00	\$0.50	\$0.70		
Bi	10	75	Red	Diffused	625	20	2.0	10	30	150	360	510	ZD-0256	\$1.50	\$1.35	\$1.05		
Di	10	75	Green	Diffused	570	20	2.1	10	30	150	300	310	ZD-0230	\$1.50	\$1.55	\$1.05		

TR	RILEDS															
	II LLDS															
		Viewing			Optical and Electronic	. Character	istics		Max Continuous	s Preferre	ed Valu	es Series				
	Size	Angle	Colour	Lens	Wavelength, Chromatic	IF Typical	l VF Typical	IV Typical	IF Max	Resis	tor (ohi	ns) for				
	(mm)	(Degrees)			Co-ord (nm), (Co-ordinates)	(mA)	(V)	(mcd)	(mA)	5VDC	9VDC	12VDC	Cat.	Qty 1+	Qty 10	+Qty 25+
		45	Red	Diffused	625	20	2.0	600	30	150	360	510				
Tri	5	45	Green	Diffused	520	20	3.5	1000	30	75	270	430	ZD-0270	\$6.95	\$6.25	\$4.75
		45	Blue	Diffused	470	20	3.5	200	30	75	270	430				
		60		Waterclear		20	1.8	200	20	160	360	510				
Tri	5 Superflux	60	Green	Waterclear	528	20	3.2	900	20	91	300	470	ZD-0010	\$4.95	\$4.45	\$3.45
		60	Blue	Waterclear	468	20	3.2	150	20	91	300	470				
		60		Waterclear		20	1.8	350	20	160	360	510				
Tri	5 Superflux	60	Green	Waterclear	528	20	3.2	600	20	91	300	470	ZD-0012	\$4.95	\$4.45	\$3.45
		60	Blue	Waterclear	468	20	3.2	900	20	91	300	470				

FLASHING LEDS													
	Optical and Electronic Char								Absolute Maximum				
	Size Viewing Angle Colour Lens Wavelength, Cl			Wavelength, Chromatic	IF Typical	VDD Typical	IV Typical	VDD Max					
	(mm)	(Degrees)			Co-ord (nm), (Co-ordinates)	(mA)	(V)	(mcd)	(V)	Cat.	Qty 1+	Qty 10+	Qty 25+
Flashing	5	50	Red	Diffused	630	20	5.0	50	10	ZD-0240	\$1.25	\$1.10	\$0.85
Flashing	5	30	Red	Diffused	643	20	5.0	60	10	ZD-1785	\$1.95	\$1.75	\$1.35
Flashing	5	45	Yellow	Diffused	597	20	5.0	35	10	ZD-0244	\$1.25	\$1.10	\$0.85
Flashing	5	45	Green	Diffused	568	20	5.0	35	10	ZD-0242	\$1.25	\$1.10	\$0.85
Flashing	5	40	Blue	Diffused	470	20	5.0	900	10	ZD-0245	\$1.95	\$1.75	\$1.35
Flashing	10	50	Red	Diffused	660	20	5.0	50	10	ZD-1965	\$2.45	\$2.15	\$1.70

TRI COLOUR SEQUENCING LEDS Absolute Maximum **Optical and Electronic Characteristics** Wavelength, Chromatic IF Typical VDD Typical IV Typical (mA) (V) (mcd) Size Viewing Angle Colour VDD Max Lens Co-ord (nm), (Co-ordinates) Qty 1+Qty 10+ Qty 25+ (Degrees) (V) (mm) Red Waterclear 625 20 1000 Coloui ZD-0246 \$6.95 \$6.25 \$4.75 30 520 Green Waterclear 20 4.5 1800 4.5 Sequencing 30 Blue Waterclean 470 20 550 500 5000 30 30 Red Waterclear 625 20 4.5 4.5 Colour ZD-0247 \$6.95 \$6.25 \$4.75 520 20 4.5 4.5 Green Waterclear Sequencing Blue Waterclear

LED PACKS

3mm Red

• 5-20mcd @ 20mA typical

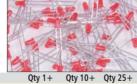
Packet of 100.



Pkt 100 5mm Red

• 5-20mcd @ 20mA typical

Packet of 100



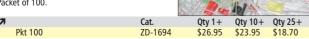
\$16.95

Cat. ZD-1690 Pkt 100

Assorted LED Pack

Consisting of 20 x 5mm red, 20 x 5mm mixed (green, yellow, orange), 40 x 3mm red, 20 x 3mm mixed (green, yellow, orange). BONUS 10 x 5mm mounting hardware AT NO CHARGE.

Packet of 100.



Cat.

LED ACCESSORIES

Light Transporter 100mm Pack of 3

Ideal for when you encounter a limitation of space, angle and distance on your project. These fibre optic light transporters are simply clipped over the LED and mounted to the panel. With high light conductivity the intensity will not diminish. Much easier to install than LED clips!



Hole cut-out size: 3.5mm

7		Pack	Cat.	Qty 1+	Qty 10+	Qty 25+	
	Suit SMD LEDs	3	HP-1192	\$9.95	\$8.75	\$7.75	
	Suit 3mm LEDs	3	HP-1193	\$9.95	\$8.75	\$7.75	

LED Clips

3MM LED CLIPS

Black.

- Requires a 4mm panel hole.
 Simply push clip in panel & insert LED
- **5MM LED CLIPS**
- Black,Requires a 6.35mm panel hole.

7			Cat.	Qty 1+	Qty 10+	Qty 25+
	Pkt 20	3mm	HP-1100	\$2.95	\$2.60	\$2.30
	Pkt 20	5mm	HP-1102	\$2.95	\$2.60	\$2.30
	Pkt 100	5mm	HP-1103	\$12.50	\$10.95	\$9.95

10MM LED BEZELS

 Black, requires a 14mm panel hole and simply snaps in. LED not included.

RELATED PRODUCT	
Also see chrome LED Bezels on next page.	



1	7	Cat.	Qty 1+	Qty 10+	Qty 25+
	Pkt 5	HP-1110	\$6.95	\$6.25	\$5.50

LED ACCESSORIES (CONTINUED)

LED Mounts

 3 way • Pkt 20 Cat. HP-1118



Single45° angle Cat. HP-1114

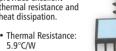


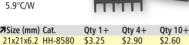
7	Size	Cat.	Qty 1+	Qty 10+	Qty 25+
Pkt 20	3mm	HP-1118	\$5.95	\$5.25	\$4.75
Pkt 20	5mm	HP-1114	\$3.25	\$2.90	\$2.60
Pkt 100	5mm	HP-1115	\$13.95	\$12.35	\$10.95

Heatsink Pin Grid Array with Adhesive Thermal Transfer Tape

This heatsink makes a perfect partner to Star LED modules. It doesn't get quicker or easier than this! Just peel the backing from the pre-mounted thermal transfer tape, press the Star LED (or whatever device) to the heatsink and it's ready to go! Don't

be fooled by the compact size. The "pin grid array" design provides excellent thermal resistance and heat dissipation.





BEZELS - LOW VOLTAGE

3mm LED Bezels

Chrome housing





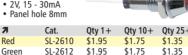
Cat.	Qty 1+	Qty 10+	Qty 25+
SL-2615	\$2.75	\$2.45	\$1.90
SL-2616	\$2.75	\$2.45	\$1.90
SL-2617	\$3.75	\$3.30	\$2.60
	SL-2615 SL-2616	SL-2615 \$2.75 SL-2616 \$2.75	SL-2615 \$2.75 \$2.45 SL-2616 \$2.75 \$2.45

5mm LED Bezels

Chrome housing

• 2V, 15 - 30mA

Blue



\$4.95

\$4.45

\$3.45

SL-2613 12V Mini Chrome Bezels

These are very classy and have either a bright 3mm red or green LED in the chrome casing. The casing measures only 10mm long & hole cutout of only 5mm.

 Supplied with flying leads about 100mm long
• Includes dropping resistor.

7	Cat.	Qty 1+	Qty 10+	Qty 25+
Red	SL-2644	\$3.65	\$3.15	\$2.90
Green	SL-2645	\$3.65	\$3.15	\$2.90

24V Chrome Bezel LED

Classy chrome casing with either a red or green 3mm LED. Supplied with flying leads with resistor, 5mm hole required.

Two types available: SL-2646 24V - 3mm Green SL-2647 24V - 3mm Red



^	Cat.	Qty I +	Qty 10+	Qty 25+
	SL-2646	\$3.65	\$3.15	\$2.90
	SL-2647	\$3.65	\$3.15	\$2.90

CREE® XP-G High Power LED, White

CREE® XP-G LEDS - PCB MOUNT

Low Voltage Bezels

Accepts Lilliput globes.

Panel hole 10mm.
Length 29mm.

 Requires Lilliput globe SI-2650 6V SL-2652 12V



7	Cat.	Qty 1+	Qty 10+	Qty 25+
Red	SL-2620	\$1.75	\$1.55	\$1.40
Green	SL-2622	\$1.75	\$1.55	\$1.40

12V Bezel Small

Red, sealed, 12 volt bright bezel for any application.

2

- Panel hole 7mm.
- Length 34mm.



Cat.	Qty 1+	Qty 10+	Qty 25+
SL-2640	\$1.95	\$1.75	\$1.55

12V Bezel Medium

Red, sealed, ideal for cars as an indicator for driving lights, etc.

- Also suitable for burglar alarms.
- Panel cut out 10mm.
- Rectangular lens 13 x 16mm.
 Length 45mm.

7	Cat.	Qty 1+	Qty 10+	Qty 25+
	SL-2642	\$1.95	\$1.75	\$1.55

12V Bezel Large

Perfect for car alarms

- Orange lens which
- measures 20 x 20mm. · Panel hole 15mm.



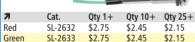
7	Cat.	Qty 1+	Qty 10+	Qty 25+
	SL-2694	\$2.95	\$2.60	\$2.30

LED BEZELS - HIGH VOLTAGE

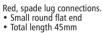
240V Chrome Bezels

Very smart units.

- Length 32mm
- 70mm leads Panel hole 7mm



240V Bezel



 10mm diameter Cut out hole 9mm

7	Cat.	Qty 1+	Qty 10+	Qty 25+
	SL-2630	\$1.65	\$1.45	\$1.30

NEONS / GLOBE HOLDER

90V NE2 Neon

Would you believe it? After about 100 years of orangey red neons we now can get blue and green ones! You'll buy one out of curiousity!

Strike voltage: 82VNeeds 270k resistor in series for 240V operation

7	Cat.	Qty 1+	Qty 10+	Qty 25+
Orange/Red	SL-2690	\$0.90	\$0.80	\$0.70
Blue	SL-2695	\$0.90	\$0.80	\$0.70
Green	SL-2696	\$0.90	\$0.80	\$0.70

Batten Globe Holder

A batten holder that is easy to fit. Unit comes apart for easy mounting. The cable screw connectors are easy to get to and are at a right angle. Supplied with plaster board mounting plugs also. A much improved batton holder



\$7.95





CREE® XP-G HIGH POWER LED. WARM WHITE

CREE® XP-G HIGH POWER LED. WHITE

Specifications	
Viewing angle	125°
Max DC forward current	1500mA
Reverse voltage	5V
Forward voltage (@350mA)	3.0V typical
Forward voltage (@700mA)	3.2V typical
Forward voltage (@1000mA)	3.3V typical
Max LED junction temp	150°C
Mounted to	10mm round PCB

Cat. ZD-0445 White Warm White ZD-0447

Cat. ZD-0445 Cat. 7D-0447

One of the latest and greatest LEDs available from the world's leading high power LED manufacturer, CREE®, the XP-

G series offers world leading lumen output and efficency. When driven at 1watt (350mA), they can deliver over 150 lumens for cool white, and over 110 lumens for warm white. To increase lumen output, you can drive them all the way up to a whopping 1500mA, which will net you around 330% of the light output at 350mA. Their versatility in

drive current and light output is matched by the versatility of their application; supplied on a 10mm round PCB, they are easily mounted to a myriad of applications including architectural lighting, mood lighting, display cabinet

lighting where limited power is available, such as remote properties, caravans, motorhomes or even marine lighting. Combine this with a life expectancy of over 50,000 hours, and you have a lighting solution that is truly hard to beat.

lighting, DIY torches, or any other lighting project. Their exceptional efficiency makes them a fantastic solution to









Coin for size

purposes only

LED Light

Narrow Angle Collimator Lens for CREE® XP-G High Power LED

The CREE® XP-G LED technology provides tremendous light from a tiny module. Harness that light and give it direction with these collimator lenses. The lenses clip directly into the holes on the LED module without any additional hardware keeping the whole package to a minimal size. LED and lens together measure a mere 9mm total height when assembled while retaining the 10mm diameter of the LED.

Lenses available in narrow or wide angle versions:

13° NARROW ANGLE Cat. HP-1282 24° WIDE ANGLE Cat. HP-1284

7	Cat.	Qty 1+	Qty 10+	Qty 25+
13° Narrow Angle	HP-1282	\$6.95	\$6.25	\$4.75
24° Wide Angle	HP-1284	\$6.95	\$6.25	\$4.75

PS-4070

LED Star Modules & Accessories

LED MODULES / LED POWER SUPPLIES

CREE® Super Bright XR LEDs

CREE® XR LEDs offer market-leading lumen output and efficiency combined with excellent lumen maintenance. They deliver over 100 lumens at 350mA (1watt), and 250 lumens at 1000mA for cool white. That's over 100 lumens/watt! They are suitable for practically any low voltage lighting application including mood lighting, signage, automotive lighting, eco-friendly home lighting fixtures, remotely powered lighting systems, etc. They can even be used as a halogen replacement or in torches etc. CREE® LEDs also provide excellent long term performance and will keep their original white colour and maintain over 70% of their original brightness even after 50,000 hours of use.

CREE® XR-series LEDs are a direct drop-in replacement for any other star module-type LED, so upgrading from existing star LEDs is simple.

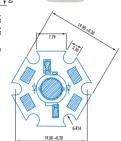
TYPICAL LUMEN PERFORMANCE

Cat	Туре	Colour	@350mA	@500mA	@700mA	@1,000mA
ZD-0424	XR-C	White	60	80	n/a	n/a
ZD-0444	XR-E	Warm White	60	80	115	150
7			Cat.	Qty 1	+	
XR-C Star	Module -	- White	ZD-0424	\$9.95		
XR-E R2 Star	Module -	Warm White	ZD-0444	\$12.9	5	



- Highest efficiency, at over 100 lm/W (XR-E)
 Directed light source for increased lighting efficiency
- Superior lumen maintenance
- Long life: above 70% output for 50,000 hours Low forward voltage DC operation

- Cool beam, safe to touch Fully dimmable without colour variation
- No UV rays or infrared heat in light beam
 Superior ESD protection
- Contains no mercury
- High max junction temp 145°C



CREE® MC-E Ultra High Power LED

If a CREE® XP-G isn't bright enough for you, then this is the LED that you want! Made with 4 individual CREE® Xlamp dies in one compact package, it offers a light output virtually unparalleled in such a small size. Mounted to a star PCB with each LED die connected in series, it offers over 430 lumens when driven at 350mA, and over 700 lumens when driven at 700mA! Driving the MC-E is relatively easy since each die is wired in series, as it is essentially the same as driving four regular CREE® LEDs in series - just use a high power LED driver that can drive multiple LEDs in series. Fantastic for making a seriously bright torch, or for super efficient lighting in limited power applications, or for any other lighting applications.

Specifications	
Viewing angle	110°
Max DC forward current	700mA
Reverse voltage	5V per die (20V total)
Forward voltage (@350mA)	3.2V per die (12.8V total)
Forward voltage (@700mA)	3.4V per die (13.6V total)
Max LED junction temp	150°C
Mounted to	20mm star PCB



CREE

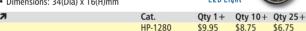
LED Light

ZD-0449 \$31.45 \$34.95

Narrow Angle Reflector for CREE® MC-E High Power LED

Focuses the tremendous light output from the CREE® MC-E LED module into a narrow 10° beam. Fits neatly over the MC-E module and extends 16mm in front of the emitter. LED module & lens combined is a mere 20mm in height.

• Dimensions: 34(Dia) x 16(H)mm



For our extensive range of LED Strips, Modules, Downlights & General Lighting see 433-445.

LENS

7° Reflector Lens for CREE® LEDs

This narrow beam lens suits our CREE® LEDs and simply clips on to provide a 7° beam. Ideal for signs, reading lamps. pathway lighting or to make your own torch.

- 18.4mm dia
- 15mm high

7 Dispersion Angle HP-1299



Qty 25+

Qty 10+

Collimator Lens for CREE® LEDs

Collimator lenses are designed to increase LED efficiency by reducing light loss caused by 'beam spreading' and provide a brighter, more focused beam. Suitable for our CREE® Star LEDs.



Dispersion Angle Otv 10+ Qty 25+ HP-1297 25 \$7.95 \$6.95 \$6.25

Collimator Lens for Star LED Module

A collimator is an optical device which is designed to produce a light beam in which the rays are parallel, or at least very near parallel. While we normally consider LEDs to be very focused in terms of light spread, in many applications there is still a vast quantity of "wasted" light spread. Designed to suit our Star LED modules (lambertian LED models only) and are manufactured from



LED POWER SUPPLIES

Luxeon® LED Power Pack

This 240 Volt power pack simplifies the power requirements of Luxeon® LEDs. An ideal power source for photographic light boxes or decorative applications 6 LEDs for the 1 Watt and the 3 Watt units.

Dimensions: 102(L) x 21(W) x 43(D)mm

• Lead lengths 1800mm on the wall socket side and 950mm Luxeon® side

7 Unit	Voltage	Current	Cat.	Qty 1+	Qty 10+	Qty 25+
1 Watt x 6	20V	350mA	MP-3272	\$27.95	\$24.95	\$22.35

LED Driver Power Supply

Input Voltage

This tiny LED driver is designed to run modern high power LEDs and is perfect for our Cree® and Edixeon range. It comes fully encapsulated for improved environmental protection and has just four wires to connect the LEDs and power source

Output Current



	VDC	mA	LEDs	(W) x (H) x (D)mm	
	9-30	3W 700	1-6	52 x 37 x	25	PRICE
7	Voltage	Current	Cat.	Qty 1+	Qty 10+	Qty 25+
	9-30	700mA	AA-0594	\$19.95	\$17.70	\$13.70

No. Drive

Dimmable Constant Current LED Driver Modules

A compact, high quality solution from Mornsun for driving high power LEDs such as our CREE® range which require a constant current power supply. Fully potted with a special coating to reduce electromagnetic interference, these drivers are quite versatile in terms of both physical interience, these divers are quite versalie in terms of both physical fittenent and electrical compatibility. Powered by 5.5-48.0VDC, they can drive up to 10 LEDs in series (input voltage must exceed LED forward voltage though), and can be dimmed either by analogue or PWM signal - meaning that even a simple potentiometer can provide dimming. Both are suitable for driving our new CREE® XP-G and MC-E models, however will not reach the full 1500mA drive current capacity of the CREE® XP-G. Two models available, 350mA and 700mA. Full datasheet available on our website

Specifications		
Input voltage	5.5 - 48VDC	
Output current	0-350mA (AA0593), 0-700mA (AA	A0595)
Dimming	Analogue or PWM signal	
Efficiency	96%	
Dimensions	24(L) x 14(W) x 8(H)mm	MORNSUN
		KG24W-700

7	Current	Cat.	Qty 1+	Qty 10+	Qty 25+
	0-350mA	AA-0593	\$17.95	\$15.95	\$12.35
	0-700mA	AA-0595	\$19.95	\$17.70	\$13.70

Power Supply for Luxeon® LED Star Modules

These tiny star LED driver modules provide a regulated current supply that is perfectly matched to the requirements of our Star LEDs. They will detect how many LEDs are loaded onto the output and automatically provide the correct voltage and regulated current, removing the necessity for any current-limiting resistors. Their small size makes them perfect for custom lighting applications. One module can drive up to 3 star LEDs in series. Input Voltage: 12-13.5VAC/DC

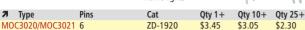
. Dimensions: 22mm diameter.

□ Ϡ Wattage	(Cat.	Qty 1+	Qty 10+	Qty 25+
1W	A	AA-0583	\$19.95	\$17.70	\$15.70
3W	A	4A-0585	\$19.95	\$17.70	\$15.70

OPTOCOUPLERS

NON - ZERO CROSSING

- Excellent stability IR emitting diode has low degradation
 High isolation voltage minimum 7500VAC peak
 Underwriters Laboratory (UL) recognised file# E90700
- Recommended for 240VAC RMS applications
- Vending machines
- Triac driver
 Motor control
- Industrial controls Solid state relay
- · Traffic lights



PHOTOTRANSISTOR OPTOCOUPLER

- AC line / digital logic isolator
- Digital logic / digital logic isolator
 Telephone / telegraph line receiver
 Twisted pair line receiver

- High frequency power supply feedback control
- Relay contact monitor
- Power supply monitor
- Small package size and low cost
- Excellent frequency response
 UL recognised file# E90700



7	Туре	Pins	Cat	Qty 1+	Qty 10+	Qty 25+
4N2	8/4N25	6	ZD-1928	\$1.75	\$1.55	\$1.20

DARLINGTON OPTOCOUPLER

- Low current 0.5mA
- Superior CTR-2000%
- Superior CMR-10 kV/μs Double working voltage
- 480VRMS CTR guaranteed 0-70°C
- UL recognised file# E90700
- Dual channel HCPL2730, HCPL-2731
- **Annlications**
- Digital logic ground isolation
- Telephone ring detector
 EIA-RS232C line receiver
- High common mode noise line receiver
- μ P bus location
- Current loop receiver





7	Туре	Pins	Cat	Qty 1+	Qty 10+	Qty 25+
	6N138	8	ZD-1940	\$4.50	\$3.95	\$3.15

SMD Optocouplers





7	Type	Case	Pkt	Cat	Qty 1+	Qty 10+	Qty 25+
	4N25S	S0IC6	10	ZD-1926	\$9.95	\$8.75	\$6.75
	4N35S	S0IC6	10	ZD-1934	\$8.95	\$7.95	\$6.25
	6N137S	SOIC8	10	ZD-1938	\$24.95	\$22.35	\$17.35
	6N138S	SOIC8	10	ZD-1943	\$24.95	\$22.35	\$17.35
	TLP113	SOIC6 NEW	EA	ZD-1941	\$5.35	\$4.75	\$3.60

Photo Interrupter

This device enables you to turn a circuit on and off optically. It consists of a moulded plastic housing with an IR LED facing a phototransistor across a gap. Any object in the gap will interrupt the IR beam and consequently switch the phototransistor on and off. The device is very fast and ideal for counting, timing or sensing. Full specs supplied with each unit.

- · PCB or chassis mounting
- Low cost
- Rugged one piece construction
- Very fast

Application:

- Counter sensorOpto ignitionTachometerEdge sensor
- Edge sensor
- Tape end sensor.









7	Cat.	Qty 1+	Qty 10+	Qty 25+
	ZD-1901	\$3.50	\$3.15	\$2.45

Toslink Transmitter & Receiver Heads

- 3.3V or 5V single power supply Low power consumption
- 8 or 16 Mbps (NRZ signal) throughput
 Input is TTL compatible
- Supplied with plug
 Fits standard Toslink cable

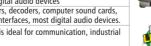




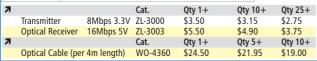


WO-4360

Application	
TRANSMITTER	DVD players, computer sound cards, USB digital / audio interfaces, most digital audio devices
RECEIVERS	Receivers, amplifiers, decoders, computer sound cards, USB digital audio interfaces, most digital audio devices.
OPTICAL CABLE	Optical fibre cable is ideal for communication, industrial or decorative use. Attenuation is 400dB per kilometre @ 650nm. Outside diameter is 2mm.



Jacket colour is black Length is 4 metres.



BAR GRAPHS & DISPLAYS

LED Bar Graph

5mm x 2.5mm rectangular LEDs mounted in a black housing. Ideal for VU meters or where any visual level is required.





Cat.	Qty 1+	Qty 10+	Qty 25+
ZD-1702	\$5.45	\$4.90	\$3.75

DIL LED

Ten individual LED elements housed in a 20 pin package to form a compact linear bar display which may be stacked end to end to create bargraphs of different lengths. Will plug into a standard 20 pin IC socket.

10 red LEDs. Typical intensity is 2.2mcd per LED.





	2.54				
l		Cat.	Qty 1+	Qty 10+	Qty 25+
		ZD-1704	\$4.45	\$3.95	\$2.95

11 Digit Fluoro Display

Vacuum fluorescent displays - still look the best. Each digit measures 6.0(H) x 3.5(W) mm, 11 digits in all. The display also features an apostrophe in the top right hand corner of the digits, and a semicolon (;) in the bottom in all 11 digits.



Qty 1+ Qty 10+ Qty 25+

- Futaba brand
- Electrical and mechanical data is included.

	ZD-1880	\$2.95	\$2.60	\$1.95
DRIVER IC ALLEGRO BRAND UDN	6118A FOR FL	UORO DIS	PLAY AB	OVE.

71	Cat.	Qty 1+	Qty 10+	Qty 25+
	ZD-1882	\$8.95	\$7.95	\$6.25

4 Digit Field Effect LCD

Suitable for meters, gauges, timers, counters and 12/24hr clocks. Extremely easy to drive and no external driver IC required. 40 pin package. Use Cat PI-6470 for socket mounting (2pc required)

Specifications	
Driving voltage	3 volts
Digit height	12.7mm
View area	45 x 17
Display size	51 x 30.5mm
Pin spacing	2.5mm

g	2.5mm				
		Cat.	Qty 1+	Qty 10+	Qty 25+
		ZD-1886	\$8.95	\$7.95	\$6.25

I FD Tester

With this basic but essential tool it is possible to check the function, brightness, colour and polarity of all kinds of light emitting diodes (LED). The LED to be tested plugs into the front panel, at the current you wish to test it with. Two 10 mA positions have been included on this multi-LED tester so that comparisons between two LEDs can be made simultaneously.



Specifications		Ī
Operating voltage	9V	
Test currents	1mA, 2.5mA, 5mA, 10mA, 20mA, 50mA	
Dimensions	74 x 54 x 22 mm	
7	Cat Ot	, 1 .

	5+
AA-0272 \$17.95 \$13.35 \$9.75	5

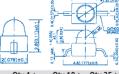
SMD TYPE LEDS - PACKS OF 10

Range of 3 colours in "Gull Wing" style package. Water clear lens.









7	Pkt	Туре	Cat	Qty 1+	Qty 10+	Qty 25+
Red	10	625nm - 70mcd @20mA	ZD-2000	\$2.95	\$2.60	\$1.95
Yellow	10	590nm - 40mcd @20mA	ZD-2005	\$2.95	\$2.60	\$1.95
Green	10	565nm - 100mcd @20mA	ZD-2010	\$2.95	\$2.60	\$1.95

INFRARED LEDS

Infrared LEDs - Transmitters

3mm EMITTING DIODE

With a blue transparent lens. Similar specifications as our ZD-1945.

Specifications	
Forward current (If)	50mA
Peak forward current (Ip)	100mA
Forward voltage (VF)	1.3V
Power dissipation (Pd)	100mW max



Cat. Qty 10+ Qty 25+ ZD-1946 \$0.90

5mm EMITTING DIODE

Specifications

With a blue transparent lens.



П	Forward current (If)	50mA max	Peak spectral v	wavelength	(IR)	940nr	n @ 20m <i>F</i>	١
ı	Peak forward current (Ip)	1.2A	Spectral bandwidth (DI) 50nm@20mA			@20mA		
ı	Forward voltage (VF)	1.2V @ 20mA	Reverse voltage (VR) 5V max		IX			
ı	Power dissipation (Pd)	100mW max	Viewing angle			30°		
ı			Material			GaAs		
L								
i	7	(Cat.	Qty 1+	Qty	10+	Qty 25+	
		7	'D-1945	\$1.25	\$1.	10	\$0.85	

Infrared LEDs - Receivers

INFRARED PHOTOTRANSISTOR

5mm LED with a clear transparent lens.

· Collector: Short leg



Specifications			
NPN collector-to-emmiter breakdown voltage	30V	Collector dark current	100nA@10V(Vce)
Emitter-to-collector breakdown voltage	5V	Rise and fall time	3uS @ 5V(Vce)
Collector-to-emmitter saturation voltage	0.8V max	Power dissipation	100mW max

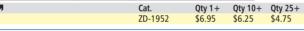
7	Cat.	Qty 1+	Qty 10+	Qty 25+
	7D-1950	¢1 25	¢1 10	\$n 85

IR LED RECEIVER

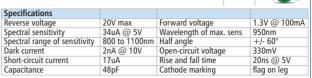
Consists of an infrared photo diode and signal processing circuitry, (amplifier, limiter, bandpass filter & demodulator). It will detect the modulated pulse from an IR Remote Control & give a TTL level output.

Data sheet available - see website

Data Silect available	C SCC WCD.	itte.	
Specifications			
Supply voltage	5V typ.	Supply voltage max	5.5V
Current consumption	0.95mA	Arrival distance Length	12m typ.
Center frequency	37.9kHz	Directivity characteristics	
Horizontal	45°	Vertical:	35°
-			



Small square device measuring 4(W) x 5.4(L) x 2(D) mm.



Qty 1+ Qty 10+ Qty 25+ ZD-1947 \$3.75 \$3.30

Specifications

Reverse voltage

32V

5nA 50ns 350mV

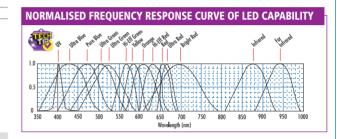
970nm

5MM PHOTODIODE

Radiant sensitive area (receiving) is on the side of the device Size 6.7(H) x 4.8(W) mm

of the device. Size 6.7(H) x 4.8(W) mm.	Spectral range of sensitivity
		Reverse dark current
	TEM	Turn on/off time (typical)
		Capacitance
	PRICE	Open-circuit voltage

7	Cat.	Qty 1+	Qty 10+	Qty 25+
	ZD-1948	\$1.25	\$1.10	\$0.85



TSOP4136 IR RECEIVER

Consists of PIN diode, pre-amplifier, AGC, pass filter, and demodulator. The main benefits are high speed data rates, short burst transmission codes, and suits cable TV remotes.

Specifications	
Supply voltage	4.5-5.5V
Supply voltage max	6V
Current consumption	1.2mA
Arrival distance length	20m
Centre frequency	36kHz
Directivity characteristics	Horizontal 45°, Vertical 45°

7	Cat.	Qty 1+	Qty 10+	Qty 25+
	ZD-1953	\$2.25	\$1.95	\$1.55

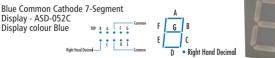






			-		
7		Cat.	Qty 1+	Qty 10+	Qty 25+
	Common Cathode	ZD-1855	\$3.45	\$3.05	\$2.30
	Common Anode	ZD-1857	\$3.45	\$3.05	\$2.30

Small Display - Blue



Specifications	
Case dimensions	17.5(H) x 12.4(W)mn
Digit height	13.2mm
Forward voltage (VF)	3.5V
Power dissipation	100mW max
Forward current (If)	35mA max

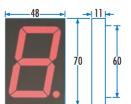


Super Large Display - Red **COMMON CATHODE**

Actual numbers 2.3" (58mm) high. Ideal for house numbers, clocks, etc.

Red 635nm





/0	60



INFO

• Right Hand Decimal

it.	Qty 1+	Qty 10+	Qty 25+
-1850	\$13.95	\$12.35	\$9.75

Linear ICs

LINEAR ICs

Through Hole

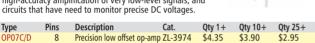
· Major brands only



Туре	Pins	Description	Cat.	Qty 1+	Qty 10+	Qty 25+
AN7511	8	Balanced transformerless				
		audio amp 1W NEW	ZL-3388	\$2.55	\$2.25	\$1.75
BA1404	18	FM stereo transmitter	ZL-3995	\$5.50	\$4.90	\$3.75
CA3140	8	4.5MHz BiMOS op-amp	ZL-3835	\$3.20	\$2.83	\$2.15
CA3130	8	15MHz BiMOS op-amp	ZL-3860	\$4.50	\$3.95	\$3.15
INA126PA	8	Micropower Instrument Amp	ZL-3976	\$5.95	\$5.25	\$4.15
LM301	8	High performance op-amp	ZL-3301	\$1.75	\$1.55	\$1.20
LM308	8	Precision op-amp	ZL-3308	\$10.95	\$9.75	\$7.50
LM311	8	Voltage comparator	ZL-3311	\$1.65	\$1.45	\$1.15
LM319	14	High speed dual comparator	ZL-3319	\$3.45	\$3.05	\$2.30
LM324	14	Quad low power op-amp	ZL-3324	\$1.85	\$1.65	\$1.25
LM334Z	3	Adjustable current source	ZL-3334	\$2.30	\$2.03	\$1.60
LM335Z	3	Temperature sensor TO92	ZL-3336	\$3.95	\$3.45	\$2.75
LM339	14	Quad low power comparator	ZL-3339	\$1.65	\$1.45	\$1.15
LM348	14	Quad 741 op-amp	ZL-3348	\$2.35	\$2.09	\$1.60
LM358	8	Dual low power op-amp	ZL-3358	\$1.75	\$1.55	\$1.20
LM380	14	Audio power amp 2.5W	ZL-3380	\$2.95	\$2.60	\$1.95
LM386N-1	8	Low voltage audio amp 325mW	ZL-3386	\$2.25	\$1.95	\$1.55
LM393	8	Low power dual comparator	ZL-3393	\$1.75	\$1.55	\$1.20
LM567	8	Low power tone decoder	ZL-3567	\$3.20	\$2.83	\$2.15
LM741	8	General purpose op-amp	ZL-3741	\$1.65	\$1.45	\$1.15

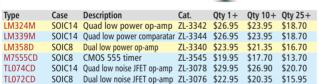
Precision Low Offset Op-amp

Ideal for applications requiring input offset voltages and long term stability (drift) orders of magnitude lower than your general purpose op-amps. This is extremely important in instrumentation applications, data acquisition, etc. The true differential input, with a wide input-voltage range and outstanding common-mode rejection, provides maximum flexibility and performance in high-noise environments and in noninverting applications. The OP07 is unsurpassed for low-noise, high-accuracy amplification of very low-level signals, and



SMD Linear ICs

• Packs of 10



General purpose op-amp ZL-3070 \$19.95 \$17.70



SMD

iype i	rins	Description	Cat.	Qty I+	Qty 10+	Qty 25+
LM747	14	Dual op-amp	ZL-3747	\$4.95	\$4.45	\$3.45
LM1458	8	Dual op-amp	ZL-3753	\$1.50	\$1.35	\$1.05
LM1875	5	25W audio power amplifier	ZL-3755	\$5.95	\$5.25	\$4.15
LM2917	14	Frequency to voltage convertor	ZL-3930	\$5.95	\$5.25	\$4.15
LM3875T	11	56W audio power amplifier	ZL-3752	\$15.95	\$14.35	\$10.95
LM3876	11	56W audio power amplifier + mute	ZL-3756	\$15.95	\$14.35	\$10.95
LM3900	14	Quad op-amp	ZL-3900	\$2.50	\$2.21	\$1.75
LM3914	18	LED bar/dot driver (linear)	ZL-3914	\$7.50	\$6.75	\$5.25
LM3915	18	LED bar/dot driver (logarithmic)	ZL-3915	\$7.50	\$6.75	\$5.25
LM4136	14	Quad high performance op-amp	ZL-3936	\$2.50	\$2.21	\$1.75
LM4558	8	Dual high performance op-amp	ZL-3958	\$1.50	\$1.35	\$1.05
LM7555	8	CMOS timer	ZL-3455	\$1.95	\$1.70	\$1.15
LMC6482AIN	8	Dual CMOS op-amp NEW	ZL-3482	\$4.95	\$4.45	\$3.45
LMC6484AIN	14	Quad CMOS op-amp NEW	ZL-3484	\$6.95	\$6.25	\$4.75
NE555	8	555 timer	ZL-3555	\$1.25	\$1.10	\$0.85
NE556	14	Dual 555 timer	ZL-3556	\$1.75	\$1.55	\$1.20
NE5534N	8	Low noise op-amp	ZL-3970	\$3.45	\$3.05	\$2.30
NE5534AN	8	Ultra low noise op-amp	ZL-3971	\$4.50	\$3.95	\$3.15
OP07C/D	8	Precision op-amp NEW	ZL-3974	\$4.35	\$3.90	\$2.95
OPA2134PA	8	Dual high perf audio op-amp	ZL-3972	\$8.45	\$7.50	\$5.75
TL071/LF351	8	Single low noise JFET op-amp	ZL-3071	\$1.95	\$1.75	\$1.35
TL072/LF353	8	Dual low noise JFET op-amp	ZL-3072	\$1.95	\$1.75	\$1.35
TL074/LF347	14	Quad low noise JFET op-amp	ZL-3074	\$2.50	\$2.21	\$1.75
TL084	14	Quad JFET op-amp	ZL-3084	\$2.20	\$1.95	\$1.50

Dual & Quad CMOS Op-amps

These are CMOS rail-to-rail op-amps that provide a commonmode range that extends to both supply rails. This rail-to-rail performance combined with excellent accuarcy, due to high CMRR, makes it unique among rail-to-rail input amplifiers. It is very useful for data acquisition voltages that require a large input signal range. The rail-to-rail output swing is guaranteed for loads down to 600Ω. Guaranteed low voltage characteristics and low power dissiption make the LMC6482 & LMC 6284 especially well-suited for battery-operated systems.

They are an excellent dual & quad instrumentation op-amps.



Туре	Pins	Description	Cat.	Qty 1+	Qty 10+	Qty 25+
LMC6482AII	N 8	Dual CMOS rail-to-rail op-amp	ZL-3482	\$4.95	\$4.45	\$3.45
LMC6484AII	N 14	Quad CMOS rail-to-rail op-amp	ZL-3484	\$6.95	\$6.25	\$4.75

SMD 555 & 556 Dual Timer ICs

- Timing from microseconds through hours
- Operates in both astable and monostable modes
- Adjustable duty cycle
- Output can source or sink 200mA
 Output and supply TTL compatible
 Temperature stabilty better than 0.005% per °C
- Normally on and normally off output
- Sold as a pack of 10

Applications:

- Precision timing Pulse generation
- Sequential timing
- Time delay generation Pulse width modulation

Otv 1+ Otv 10+ Otv 25+

- Pulse position modulation
- Linear ramp generator



Туре	Case	Description	Cat.	Qty 1+	Qty 10+	Qty 25+
NE555D	SOIC8	555 timer	ZL-3550	\$11.95	\$10.70	\$8.25
NE556D	SOIC14	Dual 555 timer	ZL-3558	\$23.95	\$21.35	\$16.70

74LS SERIES

 μ A741CD

- Low power Schottky logic
- Major brands only

		1	111.	. [,	1111.	PRICE
Type	Pins	Description	Cat.	Qty 1+	Qty 10+	Qty 25+
74LS00	14	Quad 2 input NAND gate	ZS-5000	\$0.60	\$0.50	\$0.35
74LS01	14	Quad 2 input NAND gate (OC)	ZS-5001	\$0.60	\$0.50	\$0.35
74LS02	14	Quad 2 input NOR gate	ZS-5002	\$0.75	\$0.65	\$0.60
74LS04	14	Hex inverter	ZS-5004	\$0.60	\$0.50	\$0.35
74LS05	14	Hex inverter (OC)	ZS-5005	\$0.60	\$0.50	\$0.35
74LS08	14	Quad 2 input AND gate	ZS-5008	\$0.85	\$0.72	\$0.50
74LS10	14	Triple 3 input NAND gate	ZS-5010	\$1.15	\$1.01	\$0.90
74LS11	14	Triple 3 input AND gate	ZS-5011	\$1.15	\$1.01	\$0.90
74LS14	14	Hex schmitt trigger inverter	ZS-5014	\$0.95	\$0.85	\$0.75
74LS20	14	Dual 4 input NAND gate	ZS-5020	\$0.85	\$0.75	\$0.65
74LS27	14	Triple 3 input NOR gate	ZS-5027	\$0.85	\$0.75	\$0.65
74LS30	14	Single 8 input NAND gate	ZS-5030	\$0.85	\$0.75	\$0.65
74LS32	14	Quad 2 input OR gate	ZS-5032	\$0.85	\$0.75	\$0.65
74LS42	16	BCD to decimal decoder	ZS-5042	\$1.95	\$1.75	\$1.55
74LS47	16	BCD to 7 seg decoder/driver (OC)	ZS-5047	\$1.75	\$1.55	\$1.40
74LS48	16	BCD to 7 segment decoder	ZS-5048	\$2.50	\$2.21	\$1.95
74LS73	14	Dual JK flip-flop + clear	ZS-5073	\$1.95	\$1.75	\$1.55
74LS74	14	Dual D flip-flop + preset + clear	ZS-5074	\$1.30	\$1.15	\$1.01
74LS75	16	4 bit bi-stable latch	ZS-5075	\$1.50	\$1.35	\$1.20
74LS76	16	Dual JK flip-flop + preset + clear	ZS-5076	\$2.95	\$2.60	\$2.30
74LS85	16	4 bit magnitude comparator	ZS-5085	\$1.75	\$1.55	\$1.40
74LS86	14	Quad 2 input exclusive OR gate	ZS-5086	\$1.25	\$1.10	\$0.97

Freecall order hotline: 1800 022 888

Type	riiis	Description	Cat.	Qty I +	Qty 10+	Qty 25+
74LS90	14	Decade counter	ZS-5090	\$1.65	\$1.45	\$1.30
74LS93	14	4 bit binary counter	ZS-5093		\$1.95	\$1.75
74LS109	16	Dual JK flip-flop + preset + clear	ZS-5109	\$1.20	\$1.05	\$0.95
74LS123	16	Dual retrig monostable with clear	ZS-5123	\$1.75	\$1.55	\$1.40
74LS125	14	Quad tri-state buffer	ZS-5125	\$1.75	\$1.55	\$1.40
74LS138	16	3 to 8 line decoder/demux	ZS-5138	\$1.45	\$1.30	\$1.15
74LS139	16	Dual 2 to 4 line decoder/demux	ZS-5139	\$0.95	\$0.85	\$0.75
74LS151	16	Single 8 input multiplexer	ZS-5151	\$1.75	\$1.55	\$1.40
74LS153	16	Dual 4 input multiplexer	ZS-5153	\$1.50	\$1.35	\$1.20
74LS155	16	Dual 2 to 4 line decoder/demux	ZS-5155	\$2.20	\$1.95	\$1.75
74LS157	16	Quad 2 to 1 line multiplexer	ZS-5157	\$1.45	\$1.30	\$1.15
74LS161	16	4 bit binary counter (async. reset)	ZS-5161	\$1.50	\$1.35	\$1.20
74LS164	14	8 bit shift register (ser. in/par. out)	ZS-5164	\$1.20	\$1.05	\$0.95
74LS174	16	Hex D flip-flop + clear	ZS-5174	\$1.95	\$1.75	\$1.55
74LS175	16	Quad D flip-flop with clear	ZS-5175	\$1.15	\$1.01	\$0.90
74LS192	16	Up/down dec counter/dual clock			\$1.95	\$1.75
74LS193	16	Up/down bin counter/dual clock	ZS-5193	\$1.50	\$1.35	\$1.20
74LS221	16	Dual monostable multivibrator	ZS-5221	\$1.65	\$1.45	\$1.30
74LS240	20	Octal tri-state buffer (inverting)	ZS-5240	\$1.35	\$1.15	\$0.80
74LS241	20	Octal tri-state buffer (non-inverting)	ZS-5241	\$1.95	\$1.70	\$1.15
74LS244	20	Octal tri-state buffer (non-inverting)	ZS-5244	\$1.95	\$1.70	\$1.15
74LS245	20	Octal tri-state bus transceiver	ZS-5245	\$1.95	\$1.70	\$1.15
74LS273	20	Octal D flip-flop + clear	ZS-5373	\$2.20	\$1.95	\$1.75
74LS283	16	4 bit binary full adder + carry	ZS-5263	\$1.95	\$1.70	\$1.15
74LS373	20	Octal tri-state transparent latch	ZS-5273	\$1.50	\$1.35	\$1.20
74LS374	20	Octal tri-state D flip-flop	ZS-5274	\$1.50	\$1.35	\$1.20

TTL SERIES

- Standard TTL logic
 Major brands only



Type	Pin	Description	Cat.	Qty 1+	Qty 10+	Qty 25+	
7404	14	Hex inverter	ZS-5804	\$2.20	\$1.90	\$1.30	
7405	14	Hex inverter with OC outputs	ZL-3405	\$2.20	\$1.90	\$1.30	
7406	14	Hex inverter with 30V OC outputs	ZS-5806	\$2.20	\$1.90	\$1.30	
7407	14	Hex buffer with 30V OC outputs	ZS-5807	\$1.35	\$1.15	\$0.80	

NON STATIC SHEETING

Conductive Foam

Non-static sheeting for storing CMOS, ICs,

- LSIs, etc.
 Will store up to 150 ICs on one sheet
- Reusable.

•	Size	225x1	50mm.	
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7	Cat.	Qty 1+	Qty 3+	Qty 6+
	ZV-9998	\$9.95	\$8.75	\$6.75

74HC SERIES

- High speed CMOS logic
 Major brands only







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7.	Pins	Description	Cat.	Qty 1+		Qty 25+	Туре	Pins	Description	Cat.	Qty 1+	Qty 10+	
74HC00	14	Quad 2 input NAND gate	ZC-4800	\$0.95	\$0.80	\$0.55	74HC138	16	3 to 8 line decoder/demux	ZC-4846	\$1.95	\$1.70	\$1.15
74HC02	14	Quad 2 input NOR gate	ZC-4802	\$1.15	\$0.99	\$0.65	74HC139	16	Dual 2 to 4 line decoder/demux	ZC-4848	\$1.95	\$1.70	\$1.15
74HC04	14	Hex inverter	ZC-4804	\$1.15	\$0.99	\$0.65	74HC151	16	8 to 1 line multiplexer	ZC-4849	\$1.95	\$1.70	\$1.15
74HC08	14	Quad 2 input AND gate	ZC-4808	\$1.15	\$0.99	\$0.65	74HC154	24	4 to 16 line decoder/demux	ZC-4850	\$3.50	\$2.95	\$2.05
74HC10	14	Triple 3 input NAND gate	ZC-4810	\$1.15	\$0.99	\$0.65	74HC157	16	Quad 2 line to 1 line multiplexe	r ZC-4853	\$1.50	\$1.30	\$0.90
74HC14	14	Hex schmitt trig inverter	ZC-4821	\$1.15	\$0.99	\$0.65	74HC160	16	Synch 4 bit BCD counter + preset	ZC-4855	\$2.35	\$2.03	\$1.40
74HC27	14	Triple 3 input NOR gate	ZC-4827	\$1.15	\$0.99	\$0.65	74HC161	16	Synch 4 bit binary counter + preset	ZC-4856	\$2.25	\$1.95	\$1.35
74HC30	14	8 input NAND gate	ZC-4811	\$1.15	\$0.99	\$0.65	74HC164	14	8 bit ser-in/par-out shift reg	ZC-4857	\$1.50	\$1.30	\$0.90
74HC32	14	Quad 2 input OR gate	ZC-4823	\$1.15	\$0.99	\$0.65	74HC165	16	8 bit par-in/ser-out shift reg	ZC-4858	\$1.50	\$1.30	\$0.90
74HC42	16	BCD to decimal decoder	ZC-4826	\$2.45	\$2.15	\$1.45	74HC174	16	Hex D flip-flop + clear	ZC-4862	\$1.75	\$1.50	\$1.05
74HC51	14	Dual 2 wide/2 input, 2 wide/3					74HC193	16	Synch 4 bit binary up/down counter	ZC-4864	\$1.75	\$1.50	\$1.05
		input AND-OR-INVERT gate	ZC-4828	\$1.95	\$1.70	\$1.15	74HC221	16	Dual monostable multivibrator	ZC-4865	\$2.75	\$2.38	\$1.65
74HC73	14	Dual JK flip-flop + clear	ZC-4829	\$1.95	\$1.70	\$1.15	74HC240	20	Octal tri-state buffer (inverting	ZC-4867	\$2.50	\$2.15	\$1.50
74HC74	14	Dual D flip-flop + preset + clear	ZC-4830	\$1.00	\$0.85	\$0.60	74HC244	20	Octal tri-state buffer (non-inverting)	ZC-4869	\$1.75	\$1.50	\$1.05
74HC76	16	Dual JK flip-flop + preset + clear	ZC-4832	\$1.95	\$1.70	\$1.15	74HC245	20	Octal tri-state transceiver	ZC-4870	\$1.75	\$1.50	\$1.05
74HC85	16	4 bit magnitude comparator	ZC-4834	\$1.95	\$1.70	\$1.15	74HC367	16	Hex tri-state buffer	ZC-4872	\$1.95	\$1.70	\$1.15
74HC86	14	Quad 2 input exclusive OR gates	ZC-4835	\$1.25	\$1.10	\$0.75	74HC373	20	Octal tri-state transparent latch	1ZC-4874	\$1.75	\$1.50	\$1.05
74HC107	14	Dual JK flip-flop + clear NEW	ZC-4837	\$2.25	\$1.95	\$1.35	74HC374	20	Octal tri-state D flip-flop	ZC-4875	\$1.95	\$1.70	\$1.15
74HC123	16	Dual retrig monostable					74HC393	14	Dual 4 bit binary counter	ZC-4880	\$2.25	\$1.95	\$1.35
		multivibrator + clear	ZC-4840	\$1.95	\$1.70	\$1.15	74HC573	20	Octal tri-state transparent D latch	ZC-4890	\$2.50	\$2.15	\$1.50
74HC125	14	Quad tri-state buffer (non-inverting)	ZC-4842	\$1.75	\$1.50	\$1.05	74HC595	16	8 bit tri-state ser-in/ser+				
74HC132	14	Quad 2 input NAND							par-out shift reg	ZC-4895	\$2.95	\$2.53	\$1.75
		gate + schmitt trig	ZC-4844	\$1.75	\$1.50	\$1.05	74HC4066	14	Quad bilateral analog switch	ZC-4892	\$0.95	\$0.80	\$0.55

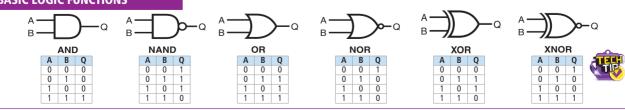
CMOS SERIES

- Standard CMOS logic
 Major brands only



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Type	Pins	Description	Cat	Qty 1+	Qty 10+	Qty 25+	Type	Pins	Description	Cat	Qty 1+	Qty 10+	Qty 25+
4001	14	Quad 2 input NOR gate	ZC-4001	\$0.95	\$0.80	\$0.55	4052	16	Dual 4 channel analog mux/demux	ZC-4052	\$0.95	\$0.80	\$0.55
4007	14	Dual comp pair plus inverter	ZC-4007	\$1.15	\$0.99	\$0.65	4053	16	Triple 2 channel analog mux/demux	ZC-4053	\$1.45	\$1.25	\$0.85
4009	16	Hex buffer (inverting)	ZC-4009	\$1.45	\$1.25	\$0.85	4056	16	BCD to 7seg LCD decoder/driver	ZC-4056	\$2.45	\$2.15	\$1.45
4011	14	Quad 2 input NAND gate	ZC-4011	\$0.95	\$0.80	\$0.55	4060	16	14-stage ripple carry binary counter	r ZC-4060	\$1.45	\$1.25	\$0.85
4012	14	Dual 4 input NAND Gate	ZC-4012	\$0.95	\$0.80	\$0.55	4066	14	Quad bi-lateral switch	ZC-4066	\$0.90	\$0.77	\$0.52
4013	14	Dual D flip-flop	ZC-4013	\$0.95	\$0.80	\$0.55	4069	14	Hex inverter	ZC-4069	\$0.95	\$0.80	\$0.55
4015	16	Dual 4 bit static shift register	ZC-4015	\$1.45	\$1.25	\$0.85	4070	14	Quad 2 input exclusive OR gate	ZC-4070	\$0.95	\$0.80	\$0.55
4016	14	Quad bi-lateral switch	ZC-4016	\$0.95	\$0.80	\$0.55	4071	14	Quad 2 input OR gate	ZC-4071	\$0.95	\$0.80	\$0.55
4017	16	Decade counter/divider	ZC-4017	\$0.95	\$0.80	\$0.55	4073	14	Triple 3 input AND gate	ZC-4073	\$0.95	\$0.80	\$0.55
4018	16	Presettable divide by N counter	ZC-4018	\$2.45	\$2.15	\$1.45	4075	14	Triple 3 input OR gate	ZC-4075	\$1.50	\$1.30	\$0.90
4020	16	14-stage ripple carry binary counte		\$1.75	\$1.50	\$1.05	4076	16	4 bit tri-state D-type register	ZC-4076	\$1.50	\$1.30	\$0.90
4021	16	8-stage static shift register	ZC-4021	\$1.75	\$1.50	\$1.05	4077	14	Quad 2 input exclusive NOR gate	ZC-4077	\$1.50	\$1.30	\$0.90
4022	16	Divide-by-8 counter/divider	ZC-4022	\$1.75	\$1.50	\$1.05	4081	14	Quad 2 input AND gate	ZC-4081	\$1.00	\$0.85	\$0.60
4023		Triple 3 input NAND gate	ZC-4023	\$1.00	\$0.85	\$0.60	4093	14	Quad 2 input NAND schmitt trigger	ZC-4093	\$1.35	\$1.15	\$0.80
4024	14	7-stage ripple carry binary counter	ZC-4024	\$1.00	\$0.85	\$0.60	4094	16	8-bit tri-state shift register/latch	ZC-4094	\$1.35	\$1.15	\$0.80
4025	14	Triple 3-input NOR gate	ZC-4025	\$1.00	\$0.85	\$0.60	4010	6 14	Hex schmitt trigger (inverting)	ZC-4914	\$1.50	\$1.30	\$0.90
4026	16	Decade counter with 7 segment output	ZC-4026	\$2.20	\$1.90	\$1.30	4502	16	Strobed hex tri-state inverter	ZC-4502	\$1.95	\$1.70	\$1.15
4027	16	Dual JK flip-flop	ZC-4027	\$0.95	\$0.80	\$0.55	4510	16	BCD up/down counter + preset	ZC-4510	\$1.75	\$1.50	\$1.05
4028	16	BCD-to-Decimal Decoder	ZC-4028	\$0.95	\$0.80	\$0.55	4511	16	BCD to 7seg decoder/driver	ZC-4511	\$1.75	\$1.50	\$1.05
4029	16	Presettable bin/decade up/down cntr	ZC-4029	\$1.50	\$1.30	\$0.90	4514	24	4-bit latched 4 to 16 line decoder	ZC-4514	\$4.45	\$3.90	\$2.60
4030	14	Quad 2 input exclusive OR gate	ZC-4030	\$1.50	\$1.30	\$0.90	4516	16	Binary up/down counter + preset	ZC-4516	\$2.25	\$1.95	\$1.35
4040	16	12-stage ripple carry binary counte	r ZC-4040	\$1.50	\$1.30	\$0.90	4518	16	Dual BCD up counter	ZC-4518	\$1.95	\$1.70	\$1.15
4046	16	Micropower phase locked loop (PLL)ZC-4046	\$1.75	\$1.50	\$1.05	4520	16	Dual binary up counter	ZC-4520	\$1.75	\$1.50	\$1.05
4047	14	Monostable/Astable multivibrator	ZC-4047	\$1.95	\$1.70	\$1.15	4528	16	Dual monostable multivibrator	ZC-4528	\$1.25	\$1.10	\$0.75
4049	16	Hex buffer (inverting)	ZC-4049	\$0.95	\$0.80	\$0.55	4538	16	Dual precision monostable multivibrato	r ZC-4538	\$2.25	\$1.95	\$1.35
4050	16	Hex buffer (non-inverting)	ZC-4050	\$0.95	\$0.80	\$0.55	4543	16	BCD to 7seg LCD latch/decoder/driver	ZC-4543	\$1.50	\$1.30	\$0.90
4051	16	Single 8 channel analog mux/demu	xZC-4051	\$1.45	\$1.25	\$0.85	4553	16	3 digit BCD counter	ZC-4553	\$4.50	\$3.90	\$2.60





Through Hole





Туре	Pins	Description	Cat	Qty 1+	Qty 10+	Qty 25+
PIC12C508A-04P	8	8 Bit Micro	ZZ-8602	\$2.45	\$2.15	\$1.70
PIC12C509A-04P	8	8 Bit Micro	ZZ-8600	\$2.45	\$2.15	\$1.70
PIC12F675	8	8 bit flash micro	ZZ-8603	\$4.85	\$4.30	\$3.30
PIC16C711-20/P	18	8 bit micro + A to D converter	ZZ-8550	\$9.95	\$8.75	\$6.75
PIC16C63A-20I/SP	28	8 bit micro +				
		A to D converter	ZZ-8560	\$11.90	\$10.70	\$8.25
PIC16F84A-20I/P	18	8 bit flash/EEPROM micro	ZZ-8500	\$9.80	\$8.75	\$6.75
PC16F88-I/P	18	8 bit enhanced flash micro				
		+ nanowatt technology	ZZ-8530	\$9.15	\$7.95	\$6.25
PIC16F628-I/P	18	8 bit flash micro	ZZ-8520	\$6.50	\$5.75	\$4.45
PIC16F877A-I/P	40	8 bit enhanced flash micro	ZZ-8540	\$10.65	\$9.50	\$7.25

SMD

Sold as a pack of 5







Туре	Case	Description	Cat	Qty 1+	Qty 10+	Qty 25+
PIC12C508A-04/SM	SOIC8	8 bit micro	ZZ-8604	\$10.50		
PIC12C509A-04/SM	SOIC8	8 bit micro	ZZ-8606	\$10.50		
PIC16C711-20I/SO	SOIC18	8 bit micro +				
		A to D converter	ZZ-8552	\$39.00	\$34.95	\$27.45
PIC16F628A-20/SO	SOIC18	8 bit flash micro	ZZ-8510	\$75.00	\$67.50	\$52.50
PIC16F84A-20/SO	SOIC18	8 bit flash/EEPROM micro	ZZ-8505	\$49.00	\$43.95	\$34.45

Digital Signal Controllers

- High performance enhanced flash digital signal controllers
- 16 bit architecture

Туре	Memory	
dsPIC30F2010	12kB/4kB	512B
dsPIC33FJ128GP802	128kB	16kB
45116551712061002	TEONE	1010



Туре	Pins	Cat.	Qty 1+	Qty 10+	Qty 25+
dsPIC30F2010	28	ZZ-8575	\$14.30	\$12.70	\$9.95
dsPIC33FJ128GP802 N	W 28	ZZ-8605	\$14.95	\$13.35	\$10.35

PIC18F4550 Microcontroller with USB Interface

Adding a USB interface to a project can often be a complex and difficult task, often involving a dedicated IC just to perform the USB control. With this PIC, you can do both I/O logic with your project and perform the USB communications with just one IC. USB will still require a bit of work but it won't be as complex any more as having to source a dedicated IC and learn how to use it. This PIC is ideal for embedded control and monitoring applications which require connection to a computer for data up/download, or firmware updates. This PIC is feature packed:

- Enhanced Flash and nanoWatt technology
- 2kB memory for data
 Full Speed USB 2.0 interface (12Mbps)
 I²Ctm and SPItm interface (10Mbps)

- Asynchronous serial port
 48MHz performance (12MIPS)



MICROCONTROLLER - ATMEL

ATMEL Microcontrollers







Туре	Pins	Description	Cat	Qty 1+	Qty 10+	Qty 25+
AT89C2051-24PU	20	8 bit micro + 2kB flash memory	ZZ-8700	\$4.70	\$4.15	\$3.15
AT90S2313-10PC	20	8 bit micro + 2kB flash memory	ZZ-8710	\$9.70	\$8.50	\$6.75
AT90S1200-12PC	20	8 bit micro + 1kB flash memory	ZZ-8750	\$9.95	\$8.75	\$6.75
ATmega8535-16PU	40	8 bit micro + 8kB flash memory	ZZ-8742	\$14.95	\$13.35	\$10.35
ATmega16L-8PU	40	8 bit micro + 16kB flash memory	ZZ-8755	\$16.80	\$14.95	\$11.70
ATmega32-16PU	40	8 bit micro + 32kB flash memory	ZZ-8760	\$18.90	\$16.95	\$12.95
ATmega8515-16PU	40	8 bit micro + 8kB flash memory	ZZ-8765	\$7.95	\$6.95	\$5.50

SMD ATMEL Microcontrollers

 Sold as a pack of 5









Туре	Case	Description	Cat	Qty 1+	Qty 10+	Qty 25+
AT89C2051-24SI	SOIC20	8 bit micro + 2kB flash memory	ZZ-8705	\$19.80	\$17.70	\$13.70
AT90S2313-10SI	SOIC20	8 bit micro + 2kB prog flash memory	ZZ-8715	\$29.60	\$26.45	\$20.70
AT90S8515-16AI	TQFP44	8 bit micro + 8kB prog flash memory	ZZ-8725	\$48.00	\$42.95	\$33.45

ATmega AVR RISC Microcontrollers

Atmel's AVR microcontrollers utilise their famous RISC core operating at market leading speeds to make some of the best microcontroller products available. Architecture engineered for working with compiled C language programs, there is no longer a need for assembly language or a need for inefficient and unwieldy BASIC, so you can develop your project quicker without having to learn a new language.

• 16MHz







ı	Туре	Pins	Description	Cat	Qty 1+	Qty 10+	- Qty 25+
ı	ATmega8-16PU	28	8 bit micro + 8kB flash memory	ZZ-8753	\$7.95	\$6.95	\$5.50
ı	ATmega128-16AI	TQFP64	8 bit micro + 128kB flash memory	ZZ-8770	\$29.95	\$26.90	\$20.70
l	ATmega162-16PU	40	8 bit micro + 16kB flash memory	ZZ-8772	\$22.90	\$20.35	\$15.95
н							

PRESS RELEASE PRESS RELEASE PRESS RELEASE PRESS RE

NEW SEMICONDUCTORS ADDED TO THE RANGE

JAYCAR DRAGGED "KICKING & **SCREAMING" INTO THE 21ST CENTURY**

Press Release 23.2.12

Jaycar Electronics has finally relented by adding new semiconductor technology to its range after a 10 year hiatus. "Its been 10 years since we introduced a new chip"

(excluding LEDs) said Jaycar Managing Director Gary Johnston. "in this business that's a lifetime". We decided to do a survey and selected a number of devices that are in common use, a bit like a BC548 for 2012.

Some of the new parts include the TSOP4136 IR receiver IC (page 55), the dual and quad CMOS op amps LMC6482AIN, the OPO7C/D, AU7511 audio power amp (all on page 56), the 74HC107, new PICs, a nifty 257 step digital pot chip, the MCP415-103E/P and some new power transistors and and some new power transistors and MOSFETs.

Better late than never!

-End of press release-

PRESS RELEASE PRESS RELEASE PRESS RELEASE PRESS RE

FREE INFORMATION SERVICE

For several years now we have been writing 'primers' - short technical articles on a topic - to help people use our products more easily. Usually they are between 2 and 6 pages long, contain text and relevant illustrations. They are freely available on our website. You can, for example, learn how to make an FM 'trap' to improve TV and FM radio reception, learn how to connect a LED across 240V safely, have the latest video interface formats explained, etc. We hold copyright on these and you must seek out permission in writing to use them for any other purpose than your personal consumption.



IFF

Special Function ICs

INTEGRATED CIRCUITS

Special Function

Major brands only



Type	Pins	Description	Cat	Qty 1+	Qty 10+	Qty 25+
1488	14	Quad line driver RS-232	ZZ-8148	\$3.20	\$2.83	\$2.15
1489	14	Quad line receiver RS-232	ZZ-8149	\$3.20	\$2.83	\$2.15
27C64	28	64k (8k x 8) EPROM	ZZ-8465	\$11.95	\$10.70	\$8.25
27C256	28	256k (32k x 8) EPROM	ZZ-8471	\$11.95	\$10.70	\$8.25
24LC16B	8	16k I ² C serial EEPROM	ZZ-8480	\$2.95	\$2.60	\$1.95
24LC256	8	256k I ² C serial EEPROM	ZZ-8485	\$4.95	\$4.45	\$3.45
ADC0804	20	8 bit A to D converter	ZK-8862	\$11.95	\$10.70	\$8.25
DAC0800LCN	16	8 bit D to A converter	ZK-8864	\$5.95	\$5.25	\$4.15
DAC0802LCN	16	8 bit D to A converter	ZK-8866	\$12.95	\$11.35	\$8.95
IR2011PBF	8	Half bridge driver 1A 200V NEW	ZK-8878	\$5.35	\$4.70	\$3.75
L6202	18	Full bridge driver 1.5A 48V NEW	ZK-8874	\$11.95	\$10.70	\$9.50
MAX 232	16	Dual RS232 driver/receiver	ZK-8824	\$4.95	\$4.45	\$3.45
MAX497CPE	16	Quad video buffer/amp	ZK-8826	\$29.95	\$26.90	\$20.70
MC34063	8	DC to DC converter	ZK-8837	\$5.75	\$4.95	\$3.95
MC145436	14	DTMF Decoder	ZK-8870	\$7.95	\$6.95	\$5.50
MK484	3	AM Radio Receiver (TO-92)	ZK-8828	\$1.95	\$1.75	\$1.55
UA494/TL494	16	Switchmode power controller	ZK-8850	\$5.20	\$4.60	\$3.60
ULN2003N	16	7 Darlington array (5V TTL, CMOS)	ZK-8855	\$3.75	\$3.30	\$2.60
XR2206	16	Monolithic function generator	ZK-8830	\$15.95	\$14.35	\$10.95
XR2211	14	FSK demodulator/tone decoder	ZK-8831	\$7.75	\$6.90	\$5.40

8Bit 257 Step Digital Pot - MCP415-103E/P

8Bit (257 step) digital pots are useful in application that require precision control. They can be used for example in the feedback network of an op amp to provide precise variable gain control, or filters to allow accurate adjustment of the filter properties.



SMD

SMD

SMD

Туре	Pins	Description	Cat	Qty 1+	Qty 10+	Qty 25+
MCP415-103E/P	8	Digital pot 257 step 10kOhm NEW	ZK-8879	\$2.75	\$2.38	\$1.90

SMD 7 Darlington Array

High voltage, high current Darlington arrays each contain seven open collector Darlington pairs with common emitters. Each channel rated at 500mA and can withstand peak currents of 600mA. Suppression diodes are included for inductive load driving and the inputs are pinned opposite the outputs to simplify board layout.



Туре	Case	Description	Cat.	Qty 1+	Qty 10+	Qty 25+
ULN2003D	SO16	5V TTL, CMOS	ZK-8858	\$27.95	\$24.95	\$19.35

SMD Switchmode PWM Controller

The TL494 is used for the control circuit of the PWM switching regulator. The TL494 consists of a 5V reference voltage circuit, two error amplifiers, flip flop, an output control circuit, a PWM comparator, a dead time comparator and an oscillator. This device can be operated in the switching frequency of 1kHz to 300kHz.

- Internal regulator provides a stable 5V reference supply trimmed to 5%
 Uncommitted output TR for 200mA sink or source current
- Output control for push-pull or single ended operation
- Variable duty cycle by dead time control (pin 4) complete PWM control circuit
- On-chip oscillator with master or slave operation
 Internal circuit prohibits double pulse at either output

Sold as a pack of 10

TL494CDR2 S016 Switchmode PWM controller ZK-8860 \$34.95	\$31.45	\$24.35

SMD SPECIAL FUNCTION ICs Sold as a pack of 10

Type	Case	Desciption	Cat.	Otv 1+	Qty 10+	Otv 25+
MC/DS1488M/D1	SOIC14	Quad line driver RS-232	ZK-8814		\$11.35	
MC/DS1489M/D1	SOIC14	Quad line receiver RS-232	ZK-8876	\$12.95	\$11.35	\$8.95
MAX232CWE	SOIC16	Dual RS-232 driver/receiver	ZK-8822	\$49.95	\$44.90	\$34.90

SEMICONDUCTOR DATA

Data on over 350 devices and their derivatives can be found on the lavcar website. Simply go to www.jaycar.com.au/semiconductor and search for the part you need data for.



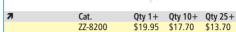
SPECIALTY ICs

HK-828 40-60 Second Voice Recorder IC

Single chip, high quality voice recording & playback solution with 40 to 60 second programmable in DIP-28L package.

- No external ICs required; minimum external components.
- Non-volatile Flash memory technology no batteries required.
 User-selectable messaging options
- User friendly, easy-to-use operation Low power consumption
- Chip enable pin for simple message expansion

See website for data sheets.



TDA1905 5W Amplifier IC with Mute

Monolithic integrated circuit in POWERDIP package, intended for use as low frequency power amplifier in a wide range of applications in radio and TV sets:

- Muting facility

- High supply voltage rejection
 Voltage range 4V to 30V
 Protection against chip over temperature
- Power dissipation of up to 6W and a thermal resistance of 15°C/W (junction to pins)
- Very low noise
- Low switch-on noise
- · Full data on website

	7	Cat.	Qty 1+	Qty 10+	Qty 25+
		ZL-3600	\$2.95	\$2.60	\$1.95

SST49LF020 LPC Flash Memory

The SST49LF020 flash memory device is designed to interface with the LPC bus for PC, game console and Internet Appliance applications. It provides protection for the storage and update of code and data in addition to adding system design flexibility through five General Purpose Inputs (GPI). The SST49LF020 is in compliance with the Intel Low Pin Count (LPC)

Interface Specification 1.0. Two interface modes are supported: LPC Mode for In-System programming and Parallel Programming (PP) Mode for fast factory programming.

7	Cat.	Qty 1+	Qty 10+	Qty 25+
	77-8900	\$1/105	¢12 25	\$10.35

DC-DC REGULATED CONVERTERS

Low noise voltage converter for communication applications

Specifications	
I/O Isolation voltage	1000VDC Min
I/O Isolation resistance	100MΩ Min
Isolation capacitance	80pF (max)
Operating temperature	-25°C to +85°C

1 WATT MODULE

Cat	Туре	Input	Output	Current
MP-3200	SPR01L-05	5VDC +10%	5VDC	200mA
MP-3202	SPR01N-05	24VDC +10%	5VDC	200mA

3 WATT MODULE

Cat	Туре	Input	Output	Current
	SCW03A-05		5VDC	600mA
MP-3206	SCW03B-0	18-36VDC	5VDC	600mA
			_	



Туре	Cat.	Qty 1+	Qty 3+	Qty 6+
SPR01L-05	MP-3200	\$9.95	\$8.75	\$7.75
SPR01N-05	MP-3202	\$9.95	\$8.75	\$7.75
SCW03A-05	MP-3204	\$19.95	\$17.70	\$15.70
SCW03B-05	MP-3206	\$19.95	\$17.70	\$15.70

MEMORY CARD SOCKETS - SURFACE MOUNTS

These sockets are ideal for development applications or repairing card readers and media devices.



7		Cat.	Otv 1+	Otv 10+	Otv 50+
"		Cdl.	Qty I +	QLY TUT	Qty 50+
	Multimedia Card	PS-0020	\$4.95	\$4.45	\$3.90
	Memory Stick	PS-0022	\$4.95	\$4.45	\$3.90
	XD Card	PS-0026	\$6.95	\$6.25	\$5.50
	Smart Media	PS-0028	\$6.95	\$6.25	\$5.50
	Compact Flash	PS-0030	\$7.95	\$6.95	\$6.25

IC/Smart Card Acceptor

These modules are for use in circuit designs incorporating the use of Smart Cards/ IC Cards. They accept either card and feature an internal SPST switch, which is triggered by card insertion. Data sheets and specifications on the website.



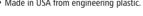
7	Cat.	Qty 1+	Qty 10+	Qty 50+
Through Hole Mount	PS-0010	\$11.95	\$10.70	\$9.50
Surface Mount	PS-0012	\$11.95	\$10.70	\$9.50

COMPONENT TOOLS, HOLDERS & EXTRACTORS

Component Lead Forming Tool

Get the hole spacing for your resistors and diodes perfect every time. This handy forming tool provides uniform hole spacing from 10 to 38mm. Suitable for production assembly, education and training. The tool is double sided with one side for use with DO47 outline diodes (eg 1N914) and 1W zener diodes; the other side being suitable for 1/4W resistors, DO41 outline diodes (eg 1N4004). An incredibly handy tool!







Soldering Heatsink & Component Holder

This quality small tool is ideal as a heatsink when soldering to remove some of the heat from the semiconductor/component while soldering. It can also be used to hold small parts while soldering to avoid burnt fingers.

Supplied with insulated handles, and length is 65mm.

• •	3			
7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2122	\$6.95	\$6.25	\$5.50

IC Extractor

Deceptively simple looking device.

- One piece metal construction
- 8 40 pins

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1818	\$2.95	\$2.60	\$2.30

PLCC Extractor

There's really only one way to remove a PLCC safely - and this is it. Basically a spring assisted clip carrier extractor, specifically designed for the safe and hassle free removal of PLCCs from sockets.



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1816	\$11.95	\$10.70	\$9.50

IC SOCKETS

All 0.1" (2.54mm) pitch

Production PCB Mount

 Solder tail · All tin plated phosphor bronze or beryllium copper



6	0.3"	PI-6499	\$0.30	\$0.25	\$0.24
8	0.3"	PI-6500	\$0.32	\$0.27	\$0.25
14	0.3"	PI-6501	\$0.35	\$0.30	\$0.27
16	0.3"	PI-6502	\$0.40	\$0.35	\$0.30
18	0.3"	PI-6503	\$0.45	\$0.40	\$0.35
20	0.3"	PI-6504	\$0.50	\$0.45	\$0.40
22	0.3"	PI-6505	\$0.55	\$0.47	\$0.42
24	0.6"	PI-6506	\$0.60	\$0.52	\$0.47
28	0.6"	PI-6507	\$0.75	\$0.65	\$0.60
40	0.6"	PI-6508	\$0.90	\$0.80	\$0.60

Pins Width Cat.

Pins Width Cat.

Low Cost

Qty 1+ Qty 10+ Qty 25+

Qty 1+ Qty 10+ Qty 25+

Gold Insert Machined Pin

· Anti-wicking very

high quality.

• Ideal for professional / portable or field service equipment.

6	0.3"	PI-6450	\$0.95	\$0.80	\$0.55
8	0.3"	PI-6452	\$1.15	\$1.01	\$0.80
14	0.3"	PI-6454	\$1.30	\$1.15	\$0.90
16	0.3"	PI-6456	\$1.50	\$1.35	\$1.05
18	0.3"	PI-6458	\$2.15	\$1.90	\$1.50
20	0.3"	PI-6460	\$2.25	\$1.95	\$1.55
22	0.3"	PI-6462	\$2.35	\$2.09	\$1.60
28	0.6"	PI-6466	\$2.95	\$2.60	\$1.95
40	0.6"	PI-6468	\$3.95	\$3.45	\$2.75

Wire Wrap Machined

 Gold insert machined pins



20	0.3"	PI-6460	\$2.25	\$1.95	\$1.55
22	0.3"	PI-6462	\$2.35	\$2.09	\$1.60
28	0.6"	PI-6466	\$2.95	\$2.60	\$1.95
40	0.6"	PI-6468	\$3.95	\$3.45	\$2.75
Pins	Width	Cat.	Qty 1+	Qty 10+	Qty 25+
Pins 14	Width 0.3"	Cat. PI-6492	Qty 1+ \$3.95	Qty 10+ \$3.45	Qty 25+ \$3.15
			٠,,	. ,	٠,
14	0.3"	PI-6492	\$3.95	\$3.45	\$3.15

IC Socket Strips

- **WIRE WRAP PINS** Gold insert
- 0.1" pitch
- Machined pin

G 0.	RE WRAP PINS old insert 1" pitch lachined pin	000000	0000000	1000	00000	3000000	PRICE
J	Pins		Cat		Qty 1+	Qty 10+	Qty 25+
	20 Way		PI-6473		\$4.50	\$3.95	\$3.15
	32 Way		PI-6472		\$6.50	\$5.75	\$4.45

PI-6470

STANDARD PINS Gold insert

- 0.1" pitch
 Machined pin

7	Pins			
	32 W	lay		

ZIF Sockets Zero Insertion Force. Drop the device in and close the lever to contact pins. Ideal for production testing.





\$3.25

	PRICE
Qty 10+	Qty 25+
\$6.75	\$5.25
¢0.75	¢7.50

\$2.15

\$2.90

7	Pins	Cat	Qty 1+	Qty 10+	Qty 25+
	18	PI-6480	\$7.50	\$6.75	\$5.25
	28	PI-6483	\$10.95	\$9.75	\$7.50
	40	PI-6484	\$11.95	\$10.70	\$8.25

PLCC Sockets

THROUGH HOLE

- Gold plated phosphor bronze contacts.
- Height: 7.7mm

Size	Size L x W mm	Cat.	Qty 1+	Qty 10+	Qty 25+	
28 pin	18 x18	PI-6600	\$2.15	\$1.90	\$1.50	
32 pin	20.6 x 20.6	PI-6602	\$2.35	\$2.09	\$1.60	
44 pin	23.5 x 23.5	PI-6604	\$2.75	\$2.45	\$1.90	
52 nin	26 x 26	PI-6606	\$2.95	\$2.60	\$1.95	



SURFACE MOUNT

- Silver plated phosphor bronze contacts.

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Size	Size L x W mm	Cat.	Qty 1+	Qty 10+	Qty 25+				
28 pin	18 x 18	PI-6620	\$2.35	\$2.09	\$1.60				
44 pin	23.5 x 23.5	PI-6624	\$2.75	\$2.45	\$1.90				
68 pin	31 x 31	PI-6628	\$4.95	\$4.45	\$3.90				
84 nin	36 x 36	PI-6630	\$5.95	\$5.25	\$4.75				



Insulation Displacement Type Header Plug

- Includes cap • 16 Way.
- Use 16 way ribbon cable

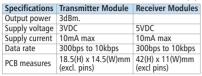


7	Cat.	Qty 1+	Qty 4+	Qty 10+
	PI-6550	\$1.95	\$1.75	\$1.55

WIRELESS SYSTEMS

433MHz Wireless Modules

These are pre-built 433MHz wireless transmitter / receiver modules. They feature ASK encoding and are ideal for devices using short data bursts such as remote controls, trigger pulses etc.





7	Cat.	Qty 1+	Qty 10+	Qty 25+
Transmitter	ZW-3100	\$10.95	\$9.75	\$8.75
Receiver	ZW-3102	\$10.95	\$9.75	\$8.75

2.4GHz Wireless AV Module

They have a tiny footprint making them even easier to use in any number of applications including toys, machinery, and a myriad of surveillance installation applications.

a myriad of surveillance installation applications.
They provide ultra high frequency stability thanks to a
PLL (phase locked loop) tuning system, and four
selectable channels within the acceptable 2.4GHz range.
They only require 5VDC and a few components to get
running, so they are extremely versatile. The receiver module measures 40 x 30mm,
and the transmitter is just 30 x 28mm. Datasheets can be found on our website for all
the technical details and application notes.

the teenmear actains and application hotesi					
Video					
Output signal level	1Vp-p +0.2V typ				
S/N ratio (100kHz,	40dB,min.				
1Vp-p Sine Wave)	400D,111111.				
Audio					
Output signal level	3Vp-p +0.2V, typ				
Output frequency	50Hz - 20KHz				
Harmonic distortion (THD)	3%max				
S/N ratio	50dB, typ (+3dB).				
7	Cat				

Receiver

General Specifications:	
	2.4G to 2.483GHz
Channel selection	PLL Synthesizer
Video-audio modulation	
/ Demodulation type	FM-FM
Supply voltage	DC +5V (+2%)
Receiver Specifications:	
	-85 to -10dBm
supply current	150mA to 170mA
Qty 1+	
3599 \$17.95	
	Operating frequency Channel selection Video-audio modulation / Demodulation type Supply voltage Receiver Specifications: Input signal level range supply current Qty 1+

5.8GHz AV Sender Experimenters Kit with IR Receivers

All AV sender transmitters are limited to strict controls and output power. This unit is for qualified and licenced amateur radio experimenters only as it has ten times the output power of standard units (100mW). In keeping with the experimental nature of the unit, it is not ready to plug in. Several parts such as the supplied RCA sockets need to be soldered in. It also doesn't come with a set of cases. It uses a standard 9V adaptor that comes with the unit. The extra power works well with experiments in say concrete buildings with lots of reinforcing steel. In all respects except output power, it's identical to AR-1840.

· Video input: Composite for NTSC or PAL



Specifications	
Transmission range	300m line of sight
Sensitivity	-85dBm
IR frequency	433.92MHz
IR modulation	ASK
IR carrier	30 - 60kHz
Operating frequency	5.76 - 5.86GHz (6 channels)
Transmission power	20 dBm (100mW)
Power supply	9VDC, Tx-500mA Rcv-400mA
Dimensions (PCB)	111(L) x 62(W)mm

Caution: This product requires further assembly, which assumes technical competence. If you feel that this may be above your skill level, please return the unit in its original packaging, with receipt, under our standard satisfaction guarantee terms. Once construction or soldering has begun we will not accept the unit back under any circumstances.

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a	Cat.	Qty 1+	Qty 2+	Qty 4+
	AR-1849	\$149.00	\$133.95	\$118.9

Mini DMM

A fantastic little multimeter at a bargain price. Great for the hobbyist, student, or person who needs a cheap and quick way to check a few basic electronic measurements. Keep one in your car glove box or front shirt pocket. Test probes included.

- 2000 Count
- 10A DC current
- · Transistor test
- · Ideal first meter
- Diode Test Compact size

Diode lest	compact size				
7	Cat.	Qty 1+	Qty 3+	Qty 6+	
	QM-1502	\$4.95	\$4.45	\$3.90	

SMART CARDS/PROGRAMMERS

Wafer Cards

With PIC16F84A + 24LC16B Inbuilt (GOLD). This is a multi-chip 'smart card' based on the PIC 16F84A and is coupled with a 24LC16B EEPROM, and compatible with most reader/programmer units available.

- 16K memory.
- ION Herrory.
 ISO 7816-1 compatible pin-out and card body
 DC to 10 MHz operating speed
- Reprogrammable with code protection
- 1024 x 14 on-chip programmable memory 64 x 8 internal EEPROM memory

- Enhanced code protection
 Greater than 1.000.000 Write/ Erase cycles



7	Cat.	Qty 1+	Qty 10+	Qty 25+
Gold	ZZ-8800	\$8.95	\$7.95	\$6.95

Full Function Smart Card Reader / Programmer Kit

This full function programmer allows you to program both the microcontroller and EEPROM in the popular gold, silver and emerald wafer cards. It hooks up to the serial port of your PC and can be operated as a free-standing unit or installed in a PC drive bay. Cards used need to conform to ISO-7816 standards, which includes ones sold by us.

- Powered by 9V via a 9-12VDC plugpack (use MP-3146)
- Provered by 3.
 The control of the control
- Kit supplied with PCB, wafer card socket & all electronic components.
- PCB measures: 141 x 101mm

Jaycar and Silicon Chip Magazine will not accept responsibility for the operation of this device, its related software, or its potential to be used for unlawful purposes.



GHIP	(BU)	DETAILED	KC-5361	\$54.95	\$49.4

Velleman PIC Programmer / Checker Module

Supporting 8 pin, 14 pin, 18 pin, and 24 pin PIC microcontrollers, this board is quite versatile. It operates as a regular programmer, but also has on-board test functions using LEDs and pushbuttons. This makes experimenting and debugging faster and easier, reducing the need for constant chip swapping between programming and operational circuits. It includes a copy of PIC programming software, and can run on Win 95 / 98 / ME / NT / 2000 and XP. It operates through the serial interface for simplicity, and supports a huge array of microcontrollers.

The list below is some, but not all of them: PIC12F629, PIC12F675, PIC16C83, PIC16CR83, PIC16F83, PIC16C84, PIC16CR84, PIC16F84, PIC16F84A, PIC16F870, PIC16F871, PIC16F872, PIC16F873, PIC16F873A, PIC16F874, PIC16F874A, PIC16F876, PIC16F876, PIC16F876, PIC16F877, PIC16F627A, PIC16F627A, PIC16F628A, PIC16F628A, PIC16F648A, PIC16F630, PIC16F676, PIC16F818, PIC16F819.

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4402	\$139.00	\$124.95	\$110.95

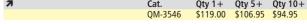
MAGNIFIER LAMP

Desk Mount LED Laboratory Magnifier Lamp

This is a high quality, all metal frame construction magnifier which features 90 super bright LEDs inside the magnifier head.

- 3 dioptre magnification
- Lens size: 125mm • Light source: 90 LEDs
- Mains powered · Total extended length 990mm
- For full specifications and details of all our

magnifiers see pages 132 - 133.







10mW Laser Diode

10mW laser diode component, red in colour & supplied with 7mm dia collimating lens.



Laser Diodes & Peltier Modules

Specifications			
Threshold current	24mA	LD reverse voltage	2V PD
Operating voltage	2.4V	Reverse voltage	30V
Operating current	40mA	Size	TO-18 (5.6mm dia)
Ontical nower	10mW		

7	Size	Cat.	Qty 1+	Qty 10+	Qty 25+
	TO-18	ZD-1955	\$9.95	\$8.75	\$6.75

1mW Laser Module - Red

Includes laser diode mounted on a PCB with a battery spring and on/off switch. Simply connect 3 x 1.5V batteries - negative to spring,

positive to case & you have an experimenter's laser.



ST-3115

10mW Laser Module - Green

The human eye is around 20 times more sensitive to green light than red, so this beam appears to be very bright indeed. This laser module consists of a 10mW laser diode, lens, and driver PCB. Simply connect a 3VDC supply, and you have a great high power laser. Datasheet included.

3VDC.
150 - 300mA.
532nm.
<7 - 10mW.
65(L) x 11(Ø)mm.



DIII	ICHSIOHS	UJ(L) X TT(Ø)IIIIII.			
7	Output	Cat.	Qty 1+	Qty 10+	Qty 25+
	10mW	ST-3117	\$99.95	\$89.95	\$79.95

HEATSHRINK COMPOUND

25% Silver Heatsink Compound

Contains 25% Silver for more efficient heat transfer than standard compounds. Comes in a small ready to use syringe. Please note that Silver Heatsink Compound does conduct electricity and care should be taken

when being used. • Size: 1.5g.

• Great computer overclocker tool



Heatsink Compound

Heat conducting paste facilitates heat transfer from semiconductors to heatsinks One 10g tube will do up to 30 TO-3 package transistors.



· Non electrically conductive

7		Cat.	Qty 1+	Qty 4+	Qty 10+	
	10g Tube	NM-2010	\$3.95	\$3.45	\$3.15	
	50g Syringe	NM-2011	\$9.95	\$8.75	\$7.75	
	150g Tube	NM-2012	\$19.95	\$17.70	\$15.70	

Heatsink Compound - Adhesive

Non electrically conductive

 One 5 gram tube will adhere up to 16 TO-3 package transistors.



7	Cat.	Qty 1+	Qty 4+	Qty 10+
5g Tube	NM-2014	\$7.95	\$6.95	\$6.25

Thermal Transfer Tape 100 x 100 x 0.5mm

When it comes to attaching devices like star LED modules to heatsinks, it's often not easy as they don't have screw "eyes" like a TO220 transistor package. The material is self adhesive and provides good thermal conductivity making it easy for chipsets, LED modules, memory modules etc.

2 pcs of Toolilli x Toolilli	i sileets suppli	eu. U.SIIIIII	IIICKII622		
Specifications					
Thermal Conductivity	1.6 W/m-k				1
Flammability Level	UL94V-O			1	
Working Temperature Range	-60 to +250°C			1	
Insulation Strength	>7,000V/mm				
-		٠.	0.4.	0. 1.	0: 40
7		Cat.	Qty 1+	Qty 4+	Qty 10-
Pack of 2		NM-2790	\$12.95	\$11.35	\$10.35

PELTIER MODULES

Thermoelectric (Peltier) Modules

These are a solid-state devices which operate as a heat pump to transfer heat utilising the Peltier effect. Suitable for cooling or heating applications up to 100°C

- Measures: 40 x 40 mm with lead wires
- Temperature differential (DT) (Th= 27° C): >=68°C
- Optimum input voltage (Vmax) (Th=27°C): 15V

1 3 , , ,	•
33.4W ZP-9100	
Optimum input current (Imax) (Th=27°C)	4A
Maximum cooling power (Qmax)	33.4W
51.4W ZP-9102	
Optimum input current (Imax) (Th=27°C)	6A
Maximum cooling power (Qmax)	51.4W
68.09W ZP-9104	
Optimum input current (Imax) (Th=27°C)	8A
Maximum cooling power (Qmax)	68.09W



1	Cooling Power	Cat.	Qty 1+	Qty 10+	Qty 25+
	33.4W	ZP-9100	\$12.95	\$11.35	\$10.35
	51.4W	ZP-9102	\$16.95	\$14.95	\$13.35
	68.09W	ZP-9104	\$19.95	\$17.70	\$15.70

Pressboard Insulation Material

Similar to Presspahn Elephantide®, this product is a heavily pressed craft-type board which is used as an insulator in mains products. It can be scored, folded and formed into many shapes, particularly into boxes or partitions to isolate mains circuits from fingers. It has good abrasion resistance and is often used in areas where chafing from vibration can occur.

- Thermal Rating: 150 CDielectric Strength: 12kV/mm.
- Sheet thickness: 0.8mm
 Sheet dimensions: 225(H) x 208(W)mm.

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	HG-9985	\$4.95	\$4.45	\$3.90

NON STATIC SHEETING

Conductive Foam

Non-static sheeting for storing CMOS, ICs,

- Will store up to 150 ICs on one sheet
- Reusable
- Size 225x150mm. 7

100	The second secon		
Cat.	Qty 1+	Qty 3+	Qty 6+
ZV-9998	\$9.95	\$8.75	\$6.75

	Qty 3+ \$8.75	

SMT TESTING METER

Autoranging SMT DMM

 Autoranging Continuity test Auto power-off

Specifically designed for SMT work with interchangeable probes and tweezer probes. Probes will connect across all standard surface mount components without danger of short circuit.



Display	6000 count	
Security class	Cat III 600V	JAYCAR QUALITY
Basic DC accuracy	1.5%	ALL METERS INCLUDE
DC voltage	600mV, 6V, 60V, 600V (+/- 0.8%)	
AC voltage	600mV, 6V, 60V, 600V, (+/- 1.0%)	QUALITY TEST LEADS
DC current	4mA,40mA,400mA,10mA (±2.5%)	
AC current	4mA,40mA,400mA,10A (±3%)	
Resistance	600, 6K, 60K, 600K, 6M, 60M ohm (
Capacitance	6nF, 60nF, 600nF, 6μF, 60μF, 600μF, 6	000μF,
Capacitance	60000μF (±3%)	FRAZU
Ave/RMS	Ave	CLEARANCE
Input impedance	10M	PRILE
Special features	SMT tweezer probes	
Dimensions	Dimensions: 110(H) x 36(W) x 21(D)n	ım

7	Cat.	Qty 1+	
	QM-1496	\$39.95	

Gas Sensors & Valves

GAS SENSORS

Hot Wire Semiconductor Gas Sensors

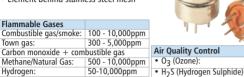
COMMON SPECIFICATIONS FOR GAS SENSORS

- General air contaminant, including; NH₃ (Ammonia), NO₂ (Nitrous Oxide), Alcohols,
- Benzene, smoke etc. Sensitivity of individual gases varies.

 General air contaminants including; n-Hexane, Benzene, NH₃ (Ammonia), Alcohol, smoke, CO (Carbon Monoxide). Sensitivity to individual gases varies

CARBON DIOXIDE (CO2) GAS SENSOR (350

- Good CO₂ sensitivity
 Operates over wider temp/humidity range
- Long term stability and reproducability
 Element behind stainless steel mesh



iowii gas.	300 3,000ppiii
Carbon monoxide + com	
Methane/Natural Gas:	500 - 10,000ppm
Hydrogen:	50-10,000ppm
Applications	

See website for comprehensive data schematics, product explanation, performance graphs etc.

(350-10,000PPM)	
e	PRICE
Air Quality Control	

10ppb - 2ppm

500 - 10,000ppm

500 - 2000ppm

Treon (or other Cr C 3).		300 - 10,000pj
C ₂ H ₂ (Acetylene):		500 - 2000ppn
NH ₃ (Ammonia)		
Specifications		
Heat voltage:	6.0 +/-	0.1V @1.2W,
Output:	0-50mV (350-10,000ppm CO ₂₎	
Operational temp:	-20° to ±50°C	

Freon (or other CFC's):

71	Cat.	Qty 1+	Qty 10+	Qty 25+
CO ₂ Sensor	RS-5600	\$39.95	\$35.90	\$31.90

ALCOHOL FUME SENSOR (0.05 TO 10.0MG/L)

- Very sensitive to CH₃-OH alcohols
- Benzene sensitivity
 Simple drive circuit
- Stable, long life
- Fast response
- Element behind stainless









- tppiications	
Fermentation process control	
 Blood-alcohol checker (BAC testing). 	
See our website for comprehensive data,	
internal schematics with diagram of external	
component requirements, comprehensive	
product data, performance graphs etc.	

Specifications:	
Heater voltage:	5.0V AC or DC at less than 750mW
Operational temp:	-10 to +50°C
Sensing resistance:	$1.0M\Omega$ to $8M\Omega$ (0.05mg/l) to 10.0 mg/l). Assumes O_2 concentration: 21%

7		Cat.	Ωtv 1⊥	Qty 10+	Otv 25-
**		cat.	Qty I T	QLY TO T	Qty 23
Alcohol Sen	sor	RS-5605	\$13.95	\$12.35	\$10.95

HYDROCARBON GAS (HC) SENSOR (200 TO 10,000PPM)

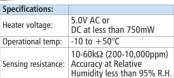
- Higher sensitivity to Propane, other LPG, iso-butane etc.
- Element behind stainless steel wire mesh
 Simple drive circuit
- Fast response
- Stable Applications

graphs etc.









5.0V AC or

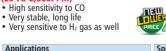
DC at less than 330mW

71	Cat.	Qty 1+	Qty 10+	Qty 25+
HC Sensor	RS-5610	\$16.95	\$14.95	\$13.35

CARBON MONOXIDE (CO) SENSOR

Petrol vapour detector
 Other safety equipment
See our website for comprehensive
data, internal schematics, performance

(20 TO 2,000PPM)



7.1515.11.01.15
Automotive • Industrial Furnace emission control • Mining See our website for extremely comprehensive information, including internal schematics, product explanation, application notes etc.

Applications
Automotive • Industrial Furnace emission control • Mining See our website for extremely comprehensive information, including internal schematics, product explanation, application notes etc.

7 Ca	it. Qty 1 -	- Qty 10+ Qty 2
internal schematics, product explanation, application notes etc.	Time to operational sensitivity:	90 seconds (max)
See our website for extremely comprehensive information, including	Operational temp:	-10 to +50°C

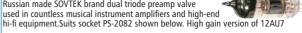
7	Cat.	Qty 1+	Qty 10+	Qty 25+
CO Sensor	RS-5615	\$19.95	\$17.70	\$15.70

Heater voltage

VALVES

12AX7WA/7025 Valve

Russian made SOVTEK brand dual triode preamp valve



Cat. Qty 10+ Otv 25+ ZA-6000 \$34.95 \$31.45 \$24.35

EL34EH/6CA7 Valve

Russian made Electro-Harmonix brand power pentode manufactured to the original Mullard (UK) specifications. As used in many Marshall musical instrument amplifiers and ultralinear output stages of hi-fi amplifiers. Suits socket PS-2080 shown below.



7	Cat.	Qty 1+	Qty 10+	Qty 25+
	ZA-6005	\$49.95	\$44.90	\$34.90

5881WXT/6L6GC Valve

Russian made SOVTEK brand power tetrode used mainly in musical instrument amplifying applications

- Recreates the tone of NOS Mullard (UK) 6L6GCs
- Suits socket PS-2080 shown below

1	Cat.	Qty 1+	Qty 10+	Qty 25+
	7A-6010	\$49.95	\$44.90	\$34.90

Valve Sockets

9 PIN:

This unit is moulded from high grade thermosetting resin. The pins are adequately plated and have deep solder terminals, sufficient for several hard wiring points per pin. Sturdy flange mount is meant for fitting above the chassis

8 PIN

Made from similar materials to above, but with moulded key

Can be mounted above or below the chassis.

7	Cat.	Qty 1+	Qty 10+	Qty 50+
9 Pin	PS-2082	\$5.95	\$5.25	\$4.75
8 Pin	PS-2080	\$6.95	\$6.25	\$5.50

Spare Valves for Hybrid Valve Amplifier (AA-0474)

- 6N1 Valve Cat ZA-6001
- 6P15 Valve Cat ZA-6002





7		Cat.	Qty 1+	Qty 10+	Qty 25+
6N1	Valve	ZA-6001	\$19.95	\$17.70	\$13.70
6P15	i Valve	ZA-6002	\$24.95	\$22.35	\$17.35

TRANSDUCERS

Ultrasonic Transducer

- · Compact and lightweight
- High sound pressure level

- Low power consumption
- High sensitivity, reliability & stability
 Transmitter & receiver in one unit

- Application:
- Parking sensors Proximity sensor
- Motion detector Automatic doors
- Intruder alarm

		water level meter	
Specifications:			
Frequency	40kHz	Input voltage	140V
Transmitting sound pressure	>105dB	Operating temperature	-40°C to +85°C
Receiving sensitivity	>-74dB		

71	Cat.	Qty 1+	Qty 5+	Qty 10+
	AU-5550	\$5.95	\$5.25	\$4.75

Ultrasonic Transducers

Ultrasonic transducers as used in Silicon Chip projects such as the ultrasonic cleaner and boat antifouling. See website for data sheets.

J		
Specifications:	AU-5554	AU-5556
Static capacitance:	2500pF	3000pF
Resonant frequency:	42kHz	40kHz
Bandwidth:	3.9kHz	3.9kHz
Impedance:	25 ohms	15 ohms
Insulated impedance:	1000M ohms	1000M ohms
Power:	35 Watt	50 Watt





7		Cat.	Qty 1+	Qty 5+	Qty 10+
	35 Watt - 42kHz	AU-5554	\$49.95	\$44.90	\$39.90
	50 Watt - 40kHz	AU-5556	\$59.95	\$53.95	\$47.90















TO-126 TO-92

S	0	T-	9

Transistors



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Туре	Polarity	Case	P _D @25°C	٧ _C	ΙC	h _{FE} min/max	(@ IC cont.	Cat.	Qty 1+	Qty 10+	Qty 25+
BC327	PNP	TO-92	625mW	50	800mA	100/630	100mA	ZT-2110	\$0.42	\$0.37	\$0.27
BC328	PNP	TO-92	625mW	30	800mA	100/630	100mA	ZT-2112	\$0.42	\$0.37	\$0.27
BC337	NPN	TO-92	625mW	50	800mA	100/630	100mA	ZT-2115	\$0.42	\$0.37	\$0.27
BC338	NPN	TO-92	625mW	30	800mA	100/630	100mA	ZT-2116	\$0.42	\$0.37	\$0.27
BC639	NPN	TO-92	830mW	80	1A	63/250	150mA	ZT-2179	\$0.75	\$0.65	\$0.50
BC546	NPN	TO-92	500mW	80	100mA	110/220	2mA	ZT-2150	\$0.26	\$0.23	\$0.18
BC547	NPN	TO-92	500mW	50	100mA	110/800	2mA	ZT-2152	\$0.26	\$0.23	\$0.18
BC548	NPN	TO-92	500mW	30	100mA	110/800	2mA	ZT-2154	\$0.26	\$0.23	\$0.18
BC549	NPN	TO-92	500mW	30	100mA	110/800	2mA	ZT-2156	\$0.26	\$0.23	\$0.18
BC550	NPN	TO-92	500mW	50	100mA	110/800	2mA	ZT-2160	\$0.32	\$0.27	\$0.22
BC556	PNP	TO-92	500mW	80	100mA	125/475	2mA	ZT-2162	\$0.32	\$0.27	\$0.22
BC557	PNP	TO-92	500mW	50	100mA	125/800	2mA	ZT-2164	\$0.26	\$0.23	\$0.18
BC558	PNP	TO-92	500mW	30	100mA	110/800	2mA	ZT-2166	\$0.26	\$0.23	\$0.18
BC559	PNP	TO-92	500mW	30	100mA	110/800	2mA	ZT-2168	\$0.26	\$0.23	\$0.18
BC640	PNP	TO-92	830mW	100	1A	63/250	150mA	ZT-2180	\$0.75	\$0.65	\$0.50
BD135	NPN	TO-126	8W	40	1.5A	63/250	150mA	ZT-2187	\$1.25	\$1.10	\$0.85
BD136	PNP	TO-126	8W	40	1.5A	63/250	150mA	ZT-2188	\$1.25	\$1.10	\$0.85
BD139	NPN	TO-126	8W	80	1.5A	63/250	150mA	ZT-2189	\$0.95	\$0.85	\$0.65
BD140	PNP	TO-126	8W	80	1.5A	63/250	150mA	ZT-2190	\$0.95	\$0.85	\$0.65
BD649	* NPN	TO-220	60W	100	8A	750	3A	ZT-2198	\$2.50	\$2.21	\$1.75
BD650	* PNP	TO-220	60W	100	8A	750	3A	ZT-2199	\$2.50	\$2.21	\$1.75
BD681	* NPN	TO-126	40W	100	4A	750	1.5A	ZT-2193	\$1.85	\$1.65	\$1.25
BD682	* PNP	TO-126	40W	100	4A	750	1.5A	ZT-2192	\$1.85	\$1.65	\$1.25
BF469	NPN	TO-126	1.8W	250	100mA	50	25mA	ZT-2200	\$1.95	\$1.75	\$1.55
BF470	PNP	TO-126	1.8W	250	100mA	50	25mA	ZT-2202	\$1.95	\$1.75	\$1.55
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Туре	Polarity	Case	P _D @25°C	v_{C}	I _C	h _{FE} min/max	k @ I _C cont.	Cat.	Qty 1+	Qty 10+	Qty 25+
MJ1001	2* NPN	TO-3	175W	600	10A	300	3A	ZT-2222	\$12.95	\$11.35	\$8.95
MJL211	93 PNP	TO-3P	200W	250	16A	25/75	8A	ZT-2227	\$12.50	\$10.95	\$8.75
MJL211	94 NPN	TO-3P	200W	250	16A	25/75	8A	ZT-2228	\$12.50	\$10.95	\$8.75
MJ1500	3 NPN	TO-3	250W	140	20A	25/150	5A	ZT-2230	\$8.50	\$7.50	\$5.75
MJ1500	4 PNP	TO-3	250W	140	20A	25/150	5A	ZT-2231	\$8.50	\$7.50	\$5.75
MJ2955	PNP	TO-3	115W	100	15A	5	10A	ZT-2235	\$2.95	\$2.60	\$1.95
MJE340	NPN	TO-126	20W	300	500mA	30/240	50mA	ZT-2255	\$2.50	\$2.21	\$1.75
MJE350	PNP	TO-126	20W	300	500mA	30/240	50mA	ZT-2260	\$2.50	\$2.21	\$1.75
MJE295	5 PNP	TO-220	75W	70	10A	20/100	4A	ZT-2275	\$2.25	\$1.95	\$1.55
MJE305	5 NPN	TO-220	75W	70	10A	20/70	4A	ZT-2280	\$2.20	\$1.95	\$1.50
MPSA06	6 NPN	TO-92	625mW	80	500mA	100	10mA	ZT-2286	\$0.35	\$0.30	\$0.24
MPSA13	3* NPN	TO-92	625mW	30	500mA	5000	10mA	ZT-2287	\$0.35	\$0.30	\$0.24
NJL1302	D PNP	TO-264	200W	260	25A	75/150	15A	ZT-2237 NEW	\$8.25	\$7.25	\$5.75
NJL3281	D NPN	TO-264	200W	260	25A	75/150	15A	ZT-2236 NEW	\$8.25	\$7.25	\$5.75
TIP2955	PNP	SOT-93	90W	100	15A	20/70	4A	ZT-2270	\$2.95	\$2.60	\$1.95
TIP3055	NPN	SOT-93	90W	100	15A	20/70	4A	ZT-2278	\$2.95	\$2.60	\$1.95
TIP31	NPN	TO-220	40W	40	3A	25/50	1A	ZT-2285	\$1.50	\$1.35	\$1.05
TIP32	PNP	TO-220	40W	40	3A	25/50	1A	ZT-2290	\$1.45	\$1.30	\$0.99
TIP35C	NPN	TO-218	125W	100	25A	15/75	15A	ZT-2293	\$4.95	\$4.45	\$3.45
TIP36C	PNP	TO-218	125W	100	25A	15/75	15	ZT-2294	\$4.95	\$4.45	\$3.45
TIP41C	NPN	TO-220	65W	100	6A	15/75	3A	ZT-2291	\$1.95	\$1.75	\$1.35
TIP42C	PNP	TO-220	65W	100	6A	15/75	3A	ZT-2289	\$1.95	\$1.75	\$1.35
TIP122	* NPN	TO-220	65W	100	5A	1000	3A	ZT-2292	\$1.95	\$1.75	\$1.35
Typo	Polarity	Caro	D- @25°C	V-	l.	h min/ma	v @ L. cont	Cat	Otv 1⊥	0tv 10⊥	Otv 25⊥

١.												
	Туре	Polarity	Case	P _D @25°C	v_{C}	I _C	h _{FE} min/max @	I _C cont.	Cat.	Qty 1+	Qty 10+	Qty 25+
	2N2222	A NPN	TO-92	1.8W	75	800mA	100/300	150mA	ZT-2298	\$0.30	\$0.25	\$0.21
	2N2907	PNP	TO-92	400mW	40	600mA	100/300	150mA	ZT-2322	\$0.95	\$0.85	\$0.65
	2N3053	NPN	TO-5	1W	60	700mA	50/250	150mA	ZT-2299	\$0.95	\$0.85	\$0.65
	2N3055	NPN	TO-3	115W	100	15A	20/70	4A	ZT-2300	\$2.50	\$2.21	\$1.75
	2N3638	PNP	TO-92	300mW	25	500mA	30/130	30mA	ZT-2320	\$1.20	\$1.05	\$0.80
	2N3773	NPN	TO-3	150W	160	16A	15/60	8A	ZT-2324	\$7.95	\$6.95	\$5.50
	2N3904	NPN	TO-92	625mW	60	200mA	70	1mA	ZT-2326	\$0.50	\$0.45	\$0.35
	2N3906	PNP	TO-92	625mW	40	200mA	80	1mA	ZT-2328	\$0.50	\$0.45	\$0.35
Г					_							

^{*} Denotes Darlington type

Freecall order hotline: 1800 022 888

TRANSISTORS

Multi-Replacement Common Transistors

Two transistors which will replace a multitude of common hard to get devices. Both are TO-92 package.



Туре	Polarity	Case	Vce	lc	h _{FE} min/max
PN100	NPN	TO-92	45V	500	80-600
PN200	PNP	TO-92	45V	500	80-600
PN200	PNP	TO-92	45V	500	8

NPN general purpose medium power amp and switch with continuous collector current up to 500mA. PN100 replaces PN2221, PN2222, PN2222A, PN3565, PN3568, PN3569, PN3643, PN5133, 2N2219A, 2N2222A, 2N3414, 2N3415, 2N3416, 2N3417, 2N3700, 2N3704, 2N3904, 2N4123, 2N4124, 2N4401, 2N5088 and 2N5210.

7	Cat.	Qty 1+	Qty 10+	Qty 50+
	ZT-2283	\$0.30	\$0.25	\$0.21

PN200
PNP general purpose amplifier at collector currents to 500mA.
PN200 replaces PN2907, PN2907A, PN3638, PN3638A, PN3640, PN3644,
PN4121, PN4143, PN4248, PN4249, PN4250, PN4355, PN4916, PN4917,
PN5910, 2N2905A, 2N3467, 2N3702, 2N3906, 2N4125, 2N4126, 2N4291,
2N4402, 2N4403, 2N5086, 2N5087, 2N5447



SMD

7	Cat.	Qty 1+	Qty 10+	Qty 50+
	ZT-2284	\$0.30	\$0.25	\$0.21
Duntatura Dani				

Prototype Pack

TRANSISTOR PACK

100 mixed BC series transistors. More of the common





		Qty 10+ \$13.35	
21 2170	y 1 1.55	Ψ13.33	¥10.55

SMD General Purpose Transistors

SOT-23 CASE - PKT 10

Туре	Polarity	Vce	Ic(mA)	Cat.	Qty 1+	Qty 10+	Qty 50+
BC807	PNP	45	500	ZT-2121	\$1.95	\$1.75	\$1.35
BC817	NPN	45	500	ZT-2118	\$1.95	\$1.75	\$1.35
BC846	NPN	65	100	ZT-2124	\$1.95	\$1.75	\$1.35
BC847	NPN	45	100	ZT-2127	\$1.95	\$1.75	\$1.35
BC848	NPN	30	100	ZT-2130	\$1.95	\$1.75	\$1.35
BC856	PNP	65	100	ZT-2133	\$1.95	\$1.75	\$1.35
MMBT2222A	NPN	40	600	ZT-2136	\$2.50	\$2.21	\$1.75
PN100	NPN	45	500	ZT-2139	\$3.40	\$2.95	\$2.30
PN200	PNP	45	500	ZT-2142	\$3.40	\$2.95	\$2.30

SOT-223 / SOT-89 CASE - PKT 10

,01 225 /	30.03 0				PHILE	
ype	Polarity	Vce	Ic(mA)	Cat.	Qty 1+	Qty 10+
CP53	PNP	80	1000	ZT-2149	\$8.95	\$7.95
CP56	NPN	80	1000	ZT-2147	\$8.95	\$7.95
ANARTA13	DARLINGTO	MC				

300

30

D-PAK CASE - PKT 10

NPN

MJD31C equivalent to TIP31C
MJD32C equivalent to TIP32C



QT2216

\$5.50

SMD

Qty 50+ \$6.25 \$6.25

Туре	Polarity	Vce	Ic(A)	Cat.	Qty 1+	Qty 10+	Qty 50+
Type MJD31C	NPN	40	3	ZT-2113	\$9.95	\$8.75	\$6.75
MJD32C	PNP	40	3	ZT-2114	\$9.95	\$8.75	\$6.75

7T-2145

\$7.95

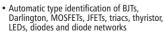
DIGITECH

\$6.95

COMPONENT TESTER

Semiconductor Component Analyser

The component tester is an intelligent semiconductor analyser that offers simple identification and testing of a variety of 2 or 3-pin semiconductor devices. In addition to providing type and lead identification, it also displays forward voltage, test current and other parameters for transistors.



- Automatic pin-out identification
- Gain & leakage current measurement for BJTs
 Silicon and germanium detection for BJTs
- Forward voltage and test current
 Dimensions: 100(W) x 71(H) x 27(D)mm

7	Cat.	Qty 1+	Qty 2+	Qty 5+
	QT-2216	\$59.00	\$52.95	\$46.95

Transistor Insulation Kits

SILICONE RUBBER TRANSISTOR INSULATORS

Silicone impregnated rubber washers. Stop using messy silicone grease. These washers are made from silicone rubber and are as effective as mica and grease.

Physical Properties:	
Colour	grey
Tensile strength	40kg/cm2
Elongation	80%
Dielectric breakdown voltage	4000/0.3mm
Co-efficient of thermal conductance	2.4 x 10-3
Flammability class	94V-0/0.3mm
Dimoncional stability	0.2% change/0.3mm



ı	Type	Pkt	Cat.	Qty 1+	Qty 4+	Qty 10+
	TO-3	20	HP-1150	\$9.50	\$8.50	\$7.50
	TO-220	20	HP-1155	\$4.95	\$4.45	\$3.90
	TO-220	100	HP-1156	\$14.95	\$13.35	\$11.70

Bushes to suit the silicone impregnated rubber washers and mica washers TO220 - Pkt 100

7	Cat.	Qty 1+	Qty 10+	Qty 50+
	HP-1166	\$8.95	\$7.95	\$6.25

SILICONE RUBBER

INSULATING KITS







1 \$1.75
0 \$1.95
0 \$1.85

TO-3 & TO-220 MICA INSIII ATING KITS

Mica washers and bushes







7	Туре	Pkt	Cat.	Qty 1+	Qty 10+	Qty 25+
	TO-3	4	HP-1122	\$2.75	\$2.45	\$1.90
	TO-220	4	HP-1142	\$1.50	\$1.35	\$1.05
	TO-220	100	HP-1140	\$11.95	\$10.70	\$8.25

ADHESIVE TRANSISTOR

MOUNTING WASHER KITS

Adhesive silicone washers with good thermal conductivity. Makes installation of transistors a snap! Complete kit supplied including washer and bushes





7	Туре	Cat.	Qty 1+	Qty 4+	Qty 10+
	TO-220	HP-1160	\$8.50	\$7.50	\$6.75
	TO-3	HP-1161	\$8.50	\$7.50	\$6.75
	TO-3P	HP-1162	\$8.50	\$7.50	\$6.75
	TO-126	HP-1163	\$8.95	\$7.95	\$6.95

FULL TO-3 INSULATING CAP

Ideal for insulating 'live' transistors or for simply keeping prying fingers away from potentially dangerous transistor cases.

- Fastens to the transistor
- Has a single ventilation hole to decrease chance of overheating.







71	Cat.	Qty 1+	Qty 10+	Qty 25+
	ZM-9904	\$1.20	\$1.05	\$0.80

TRANSISTOR CLAMPS

Transistor Clamps

To clamp TO-220 devices to a heatsink.









7	Туре	Pkt	Cat.	Qty 1+	Qty 10+	Qty 50+
	Dual TO-220	ea	HH-8610	\$1.00	\$0.90	\$0.80
	Single TO-220	10	HH-8600	\$5.95	\$5.25	\$4.15
	Single TO-220	100	HH-8602	\$19.95	\$17.70	\$15.70
	Dual TO-220	100	HH-8607	\$19.95	\$17.70	\$13.70

Voltage

30V

60V

60V

60A

300mA FET N-Ch



Description

UJT PN 300mW

FET N-Ch Power



ZT-2297

TO-220 ZT-2450 \$8.95 \$7.95

TO-92 ZT-2452 \$3.95 \$3.45

Pack

TO-92



\$4.50 \$3.95



\$2.75

Type
2N264
SNICO

UJTS

2N6027	40V		UJT Programmable 300mW	10-92	21-2397	\$1.65	\$1.45	\$1.15
FETS								
Туре	Voltage	Current	Description	Pack	Cat.	Qty 1+	Qty 10+	- Qty 25+
2N5484	25V	10mA	JFET N-Ch VHF/UHF Amp	TO-92	ZT-2375	\$1.65	\$1.45	\$1.15
2N7000	60V	20mA	FET D-MOS N-Ch Relay Driver	TO-92	ZT-2400	\$0.60	\$0.52	\$0.40
MPF102	25V	10mA	JFET N-Ch VHF Amp	TO-92	ZT-2262	\$1.50	\$1.35	\$1.05
MPF106/2N5485	25V	10mA	JFET N-Ch VHF/UHF Amp	TO-92	ZT-2266	\$1.50	\$1.35	\$1.05
STP60NF06/								

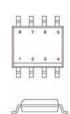
BUK-456-60 VN10KM

MOSFETS								
Туре	Voltage	Current	Description	Pack	Cat.	Qty 1+	Qty 10+	Qty 25+
2SK1058	160V	7A	MOSFET N-Ch Power	TO-3P	ZT-2460	\$19.95	\$17.70	\$13.70
2SJ162	160V	7A	MOSFET P-Ch Power	TO-3P	ZT-2465	\$19.95	\$17.70	\$13.70
BUZ71	50V	14A	MOSFET N-Ch Power	TO-220	ZT-2225	\$3.95	\$3.45	\$2.75
IRF9540N	100V	23A	MOSFET P-Ch Power	TO-220	ZT-2467	\$4.95	\$4.45	\$3.45
IRF1405N	55V	169A	MOSFET N-Ch Automotive	TO-220	ZT-2468	\$4.95	\$4.45	\$3.45
RF540N	100V	33A	MOSFET N-Ch Power	TO-220	ZT-2466	\$4.95	\$4.45	\$3.45
STP16NE06	60V	16A	MOSFET N-Ch Power	TO-220	ZT-2277	\$2.45	\$2.15	\$1.70
SUP53P06-20	60V	53A	MOSFET P-Ch NEW	TO-220	ZT-2464	\$4.95	\$4.45	\$3.45
VN10KM	60V	0.3A	FET N-Ch 0.3A	TO-92	ZT-2452	\$3.95	\$3.45	\$2.75

Dual N-Channel 30V MOSFET -Si4944DY

This handy dual N-channel MOSFET can be used in many projects such as DC-DC conversion and switching circuits. They have extremely low on-resistance (r_{DS} (on) 0.016 Ω $V_{GS} = 4.5V$) and fast switching/low capacitance. They are very useful as analog switches as well as the traditional uses for MOSFETs eg, relay driving, LED driving, etc.





Туре	Case	Pkt	Cat.	Qty 1+	Qty 10+	Qty 25+
Si4944DY	SOIC8	EΑ	ZK-8821	\$4.30	\$3.75	\$2.95

HEATSINKS

TO-220 Mini (6073B Type)

• Equivalent to popular 6073 type







Thermal resistance 20°C/W

Qty 4+ Qty 10+ HH-8502 \$0.85 \$0.75

Qty 4+ Qty 10+

\$0.95

Qty 10+

Qty 10+

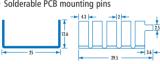
\$1.20

\$1.40

\$1.30

TO-220 (6021 Type)

Solderable PCB mounting pins





Thermal resistance Cat. HH-8504 12°C/W \$1.45

TO-220 Clip-on (6043 Type)

The heatsink will just clip over a device when required for permanent or temporary installation.







7 Thermal resistance 30°C/W

Cat. Qty 1+ Qty 4+ Qty 10+ HH-8503 \$1.20 \$1.05

These PCB mount heatsinks have two 'screw flute' channels to aid in fastening the sink to a board or surface.

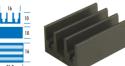


Cat.

Cat.

HH-8516

HH-8514

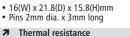


• 16(W) x 21.8(D) x 10(H)mm

7 Thermal resistance 30°C/W

TO-220

Same dimensions as our HH-8514 only with longer fins. These PCB mount heatsinks have two tinned pins to aid in fastening the sink to a board or surface.







Otv 4+

\$1.35

Qty 4+

\$1.55

Universal "U" Type Universal hole pattern allows mounting of nearly

every power transistor, as well as flat packs.

Ideal for PCB mounting.

61(W) x 36(D) x 30(H)mm.

Thermal resistance 6°C/W

Cat. HH-8511

Qty 4+ Otv 10+ \$3.20 \$2.83 \$2.45

TO-3 Minifin (AV/ML 16C Type)

Drilled to suit TO-3 case. This heatsink gives incredible heat dissipation due to its unique fin design.

• 50(L) x 50(W) x 25(H)mm.



Thermal resistance

HH-8510

Qty 1+ Qty 4+ Qty 10+ \$4.20 \$3.75 \$3.30

PC Mount TO-3P

5°C/W

Will accept up to TO-3P size flat pack transistors. (This includes TO-220). Includes 2 PC pins, which help stabilise the heatsink and allow you to solder to PCB pads.

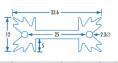
2 sizes.

25MM HIGH (6098 TYPE)

Size 33.6(W) x 12(D) x 25(H)mm. Cat. HH-8520

Size 33.6(W) x 12(D) x 40(H)mm. Cat. HH-8522

7	Thermal resistance	
	17°C/W	
	11°C/W	



Qty 10+ Cat. Qty 1+ Qty 4+ HH-8520 \$1.55 \$1.35 \$1.20

Heavy Duty TO-3P (ML97 Type)

Heavy duty version of the heatsinks described above.

Solderable screw studs

• Size 42(W) x 25(D) x 38(H)mm





For more heatsinks see page 98

Thermal resistance 7.5°C/W

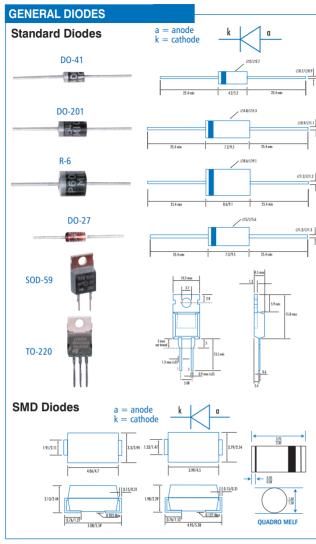
HH-8526

Qty 1+ Qty 4+ Qty 10+ \$2.45

19°C/W

\$1.55

SMD



THROUGH HOLE DIODES • SSR = Standard Silicon Rectifier Description Case Pkt Otv 10+ Otv 25+ Type Cat. 400V D0-41 ZR-1004 \$0.45 \$0.41 \$0.50 1N4004 400V 1A D0-41 100 ZR-1005 \$5.95 \$5.25 \$4.15 1N4007 1000V 1A D0-41 ZR-1007 \$0.60 \$0.54 \$0.49 1N4007 1000V 1A D0-41 100 ZR-1008 \$10.00 \$7.50 \$5.50 1N4934 SSR 100V 1A D0-41 10 7R-1001 \$2 95 \$2.15 \$1.60 1N5404 SSR 400V ЗΔ DO-201 ea 7R-1014 \$0.25 \$0.18 \$0.13 400V 3A 1N5404 DO-201 100 7R-1015 \$9.95 \$7.25 \$5.25 1000V 3A \$0.30 1N5408 SSR DO-201 ea ZR-1018 \$0.22 \$0.16 1N5408 1000V 3A DO-201 100 ZR-1017 \$12.95 \$9.50 \$6.95 1N5711 Schottky 70V 15mA **NEW** D0-35 ZR-1027 \$0.60 \$0.45 \$0.32 ea 1N5819 Schottky 40V 1A D0-41 ZR-1020 \$0.60 \$0.45 \$0.32 ea 40V 3A **NEW** D0-201 ZR-1048 1N5822 Schottky \$0.95 \$0.70 \$0.50 ea 1N5822 Schottky 40V 3A D0-201 ZR-1023 \$5.95 10 \$4.45 \$3.15 1N914/1N4148 Signal 100V 150mA D0-27 ZR-1100 \$0.40 \$0.30 \$0.22 1N914/1N4148 100 ZR-1105 \$4.95 100V 150mA DO-27 \$3.60 \$2.60 6A1/P600B SSR 100V 6A R-6 10 ZR-1041 \$11.95 \$8.75 \$6.50 6A4/P600G SSR 400V R-6 ZR-1044 \$11.95 \$8.75 \$6.50 6A 10 6A10/P600M SSR 1000V 6A ZR-1024 \$1.95 \$1.45 \$1.05 R-6 ea BAT46/48 Schottky 100V 150mA D0-27 ZR-1141 \$1.20 \$0.90 \$0.65 ea BY229 Fast 600V 8A SOD-59 ZR-1028 \$5.95 \$4.45 \$3.15 ea 100V 3A D0-27 ZR-1050 \$2.95 FR302 Fast 10 \$2.15 \$1.60 1000V 3A ZR-1052 FR307 Fast D0-27 \$2.95 \$1.60 FR607 Fast 1000V 6A D0-27 10 ZR-1054 \$14.95 \$10.95 \$7.95 MBR20100CT Dbl Schottky 100V 20A TO-220 ZR-1039 \$14.95 \$10.95 \$7.95 ea MRR735 Schottky 35V 7A NEW TO-220 7R-1029 \$1.50 \$0.80 ea \$1.10 Super fast 600V D0-27 10 7R-1090 \$5.95 \$4.45 \$3.15 SF37 3A UF4003 Ultrafast 200V ZR-1034 \$0.95 \$0.70 D0-41 \$0.50 1A ea Ultrafast 400V ZR-1036 UF4004 D0-41 \$1.25 \$0.90 \$0.65 1A ea UF4007 Ultrafast 1000V 1A D0-41 ZR-1038 \$1.75 \$1.30 \$0.95 ea

SURFACE MOUNT DIODES

· Sold as a pack of 10

Туре	Descrip	tion	Case	Cat.	Qty 1+	Qty 10+	Qty 25+
1N914/1N4148	100V 1	50mA	QUADRO MELF	ZR-1103	\$5.95	\$4.45	\$3.15
SM4004A	400V	1A	D0-214AC	ZR-1003	\$4.95	\$3.60	\$2.60
SM4007A	1000V	1A	D0-214AC	ZR-1009	\$5.95	\$4.45	\$3.15
SM4934A	100V	1A	D0-214AC	ZR-1070	\$5.95	\$4.45	\$3.15
SM4937A	600V	1A	D0-214AC	ZR-1075	\$5.95	\$4.45	\$3.15
SM5819A Schottky	40V	1A	D0-214AC	ZR-1021	\$5.95	\$4.45	\$3.15
SM5822B Schottky	40V	3A	D0-214AA	ZR-1025	\$5.95	\$4.45	\$3.15

7R-1450

ZR-1440

ZR-1480

ZENER DIODES 1 Watt Zener Diodes* ABSOLUTE MAXIMUM RATINGS Voltage Cat. Qty 1+ Qty 10+ Qty 50+ Type Power dissipation 1N4733 5V1 ZR-1403 \$0.55 \$0.47 6.67mW/°0 Derate above 50°C -65°C to +200°C 1N4734 5V6 ZR-1404 \$0.55 \$0.47 \$0.37 Storage temperature range = cathode Operating junction temperature +200°C 1N4735 6V2 7R-1405 \$0.55 \$0.47 \$0.37 Thermal resistance junction to lead 53 5°C/W 1N4736 61/8 7R-1406 \$0.55 \$0.47 \$0.37 100°C/W Thermal resistance junction to ambient 1N4737 7V5 7R-1407 \$0.47 \$0.55 \$0.37 Lead temperature 1N4738 8V2 7R-1408 \$0.55 \$0.47 230°C \$0.37 (1/16" from case for 10 seconds) 1N4739 9V1 ZR-1409 \$0.55 \$0.47 \$0.37 10\/ Surge power* 1N4740 10V ZR-1410 \$0.47 \$0.55 \$0.37 DO-41 Case Size 1N4741 ZR-1411 11V \$0.55 \$0.47 \$0.37 1N4742 12V ZR-1412 \$0.55 \$0.47 \$0.37 *Non-recurrent square wave PW=8.3ms, TA=55°C Note 1: ratings are based on max junction temperature of 200°C 1N4743 13V ZR-1413 \$0.55 \$0.47 \$0.37 Note 2: These are steady state limits. The factory should be consulted 1N4744 15V ZR-1415 \$0.55 \$0.47 \$0.37 on applications involving pulsed or low duty cycle operations. 1N4745 16V ZR-1416 \$0.55 \$0.47 \$0.37 1N4746 181/ 7R-1418 \$0.55 \$0.47 \$0.37 1N4747 20V 7R-1420 \$0.55 \$0.47 \$0.37 Voltage Qty 10+ Qty 50+ Type 1N4748 \$0.55 \$0.47 \$0.37 22V 7R-1422 1N4728 3V3 7R-1398 \$0.55 \$0.47 \$0.37 1N4749 24V ZR-1424 \$0.55 \$0.47 \$0.47 \$0.37 3V6 ZR-1399 \$0.55 1N4729 \$0.37 1N4750 27V ZR-1427 \$0.55 \$0.47 \$0.37 ZR-1400 1N4730 3V9 \$0.55 \$0.47 \$0.37 1N4751 30V ZR-1430 \$0.55 \$0.47 \$0.37 1N4731 4V3 ZR-1401 \$0.47 \$0.55 \$0.37 1N4752 33V ZR-1433 \$0.55 \$0.47 \$0.37 1N4732 4V7 ZR-1402 \$0.55 \$0.47 \$0.37 1N4753 36V ZR-1436 \$0.55 \$0.47 \$0.37 1N4754 39V ZR-1439 \$0.55 \$0.47 \$0.37 1N4761 75V ZR-1475 \$0.75 \$0.65 \$0.50 5 Watt Zener Diodes 1N53XXB Series Silicon Zener Diodes are a high quality TEU voltage regulator for use in industrial, commercial, entertainment and computer applications. Voltage Qty 1+ Qty 10+ Qty 50+ **ABSOLUTE MAXIMUM RATINGS** Type Cat.

Power dissipation (@TL=75°C)
Operating and storage temperature

Tolerence "B Suffix"

5 Watts

+5%

-65°C to +200°C

1N5352B

1N5349B

1N5374B

15V

12V

anode

= cathode

\$1.35

\$1.35

\$1.05

\$1.05

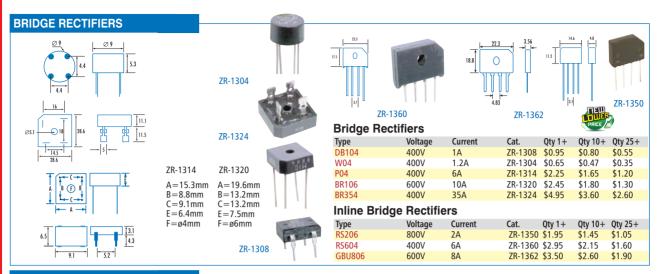
\$1.05

\$1.50

\$1.50

\$1.55

Bridge Rectifiers & Voltage Regulators



VOLTAGE REFERENCE DIODES

These two devices provide a stable 2.5V reference point for circuitry and can be used to make portable meters, regulators or general purpose analog cicuitry.

The extremely low power drain of the LM285Z-2.5 makes it very useful for micropower circuitry as it can operate with as little as 20µA. The LM285Z-2.5 can enable circuits to operate with battery life approaching shelf life. This is one of the lowest current devices of any discrete voltage references available.







Type	vret	IT (min)	Case	Cat.	Qty 1+	· Qty 10+	Qty 25+
LM285Z-2.5 Micropower NEW	2.5V	20uA	TO-92	ZV-1626	\$3.95	\$3.45	\$2.75
LM336-2.5	2.5V	10mA	TO-92	ZV-1624	\$3.55	\$3.15	\$2.45

VOLTAGE REGULATORS

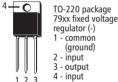


TO-220 package 78xx 1A fixed voltage

regulator (+) - input 2 - common

(around)

output 4 - common





+0

TO-220 package 317T 1.5A

regulator (+)

- adiust

output

TO-220 package

337T voltage

regulator (-)

- adjust

3 - input

4 - output

adjustable voltage

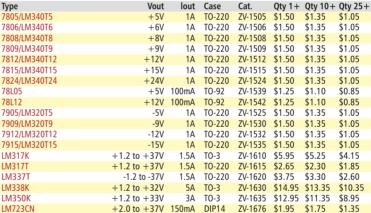


Connections for the TO-3 LM317K, LM338K & LM350K (viewed from bottom)

TO-92 781 XX (viewed from bottom)

Standard Voltage Regulators





Switching Voltage Regulators

Low Dropout Regulators





Freecall order hotline: 1800 022 888

-	_	•						
Туре		Vout	lout	Case	Cat.	Qty 1+	Qty 10+	- Qty 25+
LM2576T-ADJ	Stepdown	+1.23 to +37V	3A	TO-220	ZV-1640	\$14.95	\$13.35	\$10.35
LM2577T-12	Stepup	+12V	3A	TO-220	ZV-1642	\$14.95	\$13.35	\$10.35
LM2678T-5.0 NEW	Stepdown	+5V	5A	TO-220	ZV-1636	\$14.95	\$13.35	\$10.35
LM2678T-12 NEW	Stepdown	+12V	5A	TO-220	ZV-1637	\$14.95	\$13.35	\$10.35
LM2678T-ADJ NEW	Stepdown	+1.2 to +37 V	5A	TO-220	ZV-1638	\$14.95	\$13.35	\$10.35
TL499ACP NEW	Controller	+2.9 to +30V	100mA	DIP8	ZV-1644	\$3.50	\$3.15	\$2.45

ЗА TO-220

TO-220

ZV-1632

ZV-1634

\$4.45

\$3.95

\$2.95

+5V

											· Qty Z5+
LM3940	Fixed voltage		TO-220	4.5 to 5.5V	+3.3V	1.0A	500mV at 1A	ZV-1565	\$3.50	\$3.15	\$2.45
LM2936-3.3	Ultra low quiescent current	NEW	TO-92	4.0 to 26V	+3.3V	50mA	200mV at 50mA	ZV-1650	\$3.85	\$3.45	\$2.75
LM2936-5.0	Ultra low quiescent current	NEW	TO-92	5.5 to 26V	+5V	50mA	200mV at 50mA	ZV-1652	\$3.85	\$3.45	\$2.75
LM2940CT-5.0	Fixed voltage		TO-220	6.25 to 26V	+5V	1.0A	500mV at 1A	ZV-1560	\$7.55	\$6.75	\$5.25
LM2940CT-12	Fixed voltage		TO-220	13.6 to 26V	+12V	1.0A	500mV at 1A	ZV-1646	\$2.00	\$1.80	\$1.40
LP2951ACN	Micropower adjustable voltage	NEW	DIP8	2.0 to 30V	+1.24 to +29 V	100mA	380mV at 100mA	ZV-1562	\$7.55	\$6.75	\$5.25
LM1085IT-12	Fixed voltage, high current		TO-220	13.5 to 25V	+12V	3.0A	1.3V at 3A	ZV-1564	\$7.95	\$6.95	\$5.50
LP2950ACZ-5.0	Micropower fixed voltage	NEW	TO-92	6.0 to 30V	+5V	100mA	380mV at 100mA	ZV-1645	\$1.45	\$1.30	\$0.99
MCP1703-5002E/CB	Ultra low quiescent current	NEW	SOT-23	5.33 to 16V	+5V	250mA	330mV at 250mA	ZV-1545	\$19.95	\$17.70	\$13.70
REG103-A	Ultra low dropout	NEW	SOT-23	2.1 to 16V	+1.3V to +5.5V	500mA	115mV at 500mA	ZV-1654	\$10.45	\$9.25	\$7.25

MC78T05

VOLTAGE REGULATORS (CONTINUED)

SMD Voltage Regulators

• All 100mA

Type LM317LMX

MC78L05

MC78I 08

MC78L12

MC78M05

MC79L12

MC78M12CDT

MC78M15CDT

SMICLM317M



Voltage

+ADJ

+5V Fixed

+8V Fixed

+12V Fixed

+5V Fixed

+12V Fixed

-12V Fixed

+ADJ



SOIC8

SOICS

SOIC8

SOIC8

DPAK

DPAK

SOIC8

DPAK



ZV-1612

ZV-1540

7V-1546

ZV-1548

ZV-1544

ZV-1510

ZV-1552

ZV-1550

ZV-1583



\$24.95

\$14.95

\$9.95

\$9.95

\$14.95

\$14.95

\$9.95

\$24.95



\$22.35

\$13.35

\$8.75

\$8.75

\$13.35

\$13.35

\$17.70

\$8.75

\$22.35



Qty 25+

\$17.35

\$10.35

\$6.75

\$6.75

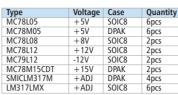
\$10.35

\$10.35

\$13.70

\$6.75

\$17.35



Cat.

ZV-1616

SMD Voltage Regulators - 30 Pack

Mixed pack of SMD voltage regulators



Qty 1+	Qty 10+	Qty 25+
\$17.95	\$15.95	\$12.35

R2 = (96 x Vout) - R1

voltage of 1.25V

 $R2 = 1608\Omega$

 $R2 = (96 \times 18) - 120$

= 1728 - 120

Vout = $(1 + \frac{112}{R1})$

∴ Vout = 18V

Vout can be calculated thus: $Vout = (1 + \frac{R2}{R1}) V_{ref}$

where Vref is the internal reference

An example: 18V output required

R2

 $= (1 + \frac{1608}{120}) \times 1.25$

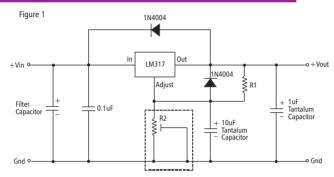
 $= (1 + 13.4) \times 1.25$

 $= 144 \times 125$

ADJUSTABLE VOLTAGE REGULATORS

+15V Fixed DPAK





The circuit above, with a fixed resistor inside the dotted box, enables R1 and R2 to determine the output voltage of a regulated power supply. R1 and R2 basically form a voltage divider accross the output voltage. Manufacturer's data tells us that the regulator needs a nominal 1.25V accross R1. In all practical cases, this resistor is 120Ω. R2, then effectively sets the output voltage. R2 can be calculated as shown above.

In all cases Vin must exceed Vout by at least 2.5V for proper regulation, but the greater the input voltage margin in excess of 2.5V the greater the dissipation in the voltage regulator device. For fixed outputs therefore, proper selection of DC source voltage will minimise this dissipation.

Note: The capacitors in the circuit are used for ripple rejection and to keep the circuit from oscillating (ringing). They should be mounted as close to the regulator and earth as possible along with R1. The diodes protect the IC from short circuits at Vout or Vin.

For applications where the output voltage must be varied (such as a bench power supply), R2 should be a trimpot or full rotary potentiometer. Whilst the LM317 will cope with a range of 1.5 - 37V practical limitations prevent this from happening at full current.

The circuit above is the simplest configuration for a variable power supply. R2 can nominally be $5k\Omega$ in this case. Dissipation in the LM317 will become excessive when Vin exceeds Vout by more than 13V at 1.5A

INCREASING THE OUTPUT VOLTAGE

If you only have a 7805 or a 7905 regulator, and want a regulated 6V power supply, this can be accomplished with the basic circuit and formula below. As you can see, R1 is 200Ω and R2 40Ω . 220Ω and 39Ω resistors may be safely substituted in this case. Equally close standard value resistors can be substituted in other cases, as in using 470Ω resistor where calculations suggest 480Ω (below).

Example. 6V from 7805

$$R1 = \frac{Vreg}{0.025} = \frac{5}{0.025} = 200\Omega$$

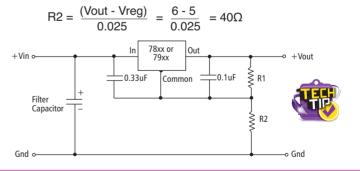
Where:

= required output voltage +Vout

+Vin= input voltage

Vreg = fixed regulator voltage eg. 7805 = 5V

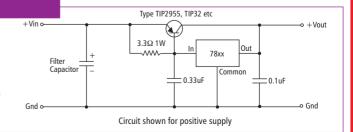
Vou	Regulator Type	R1Ω	R2Ω
9	7805	200	160
15	7812	480	120



INCREASING THE OUTPUT CURRENT

If more than one amp is needed, this can be accomplished by using a higher current fixed regulator, which is not only expensive, but sometimes scarce, or by using a series pass power transistor as shown in the circuit below. Note that the power transformer and bridge rectifier must be capable of providing the extra current. The value of the filter capacitor will also have to be increased substantially as well. Apart from this, the output current is only limited by the current rating of the power transistor used.

INCREASING OUTPUT VOLTAGE AND CURRENT SIMPLY COMBINE THE TWO CIRCUITS ABOVE



SCRs, DIACs, TRIACs & Crystals

SCR'S / TRIAC'S / DIAC'S

SILICON CONTROLLED RECTIFIERS - Reverse blocking thyristors glassivated PNPN devices designed for high volume consumer applications such as temperature, light and speed control, process and remote control and warning systems where reliabilty of operation is important.

Glassivated surface for reliabilty and uniformity

Power rated at economical prices Sensitive gate triggering

• Practical level triggering and holding characteristics Flat, rugged, thermopad construction for low thermal resistance, high heat dissipation and durabilty.

iype	vmax	IE(A)	VF(V)	IG(μA)	VG(V)	Hold In(MA)	Cat.	
BT169D	400	0.8	1.2	50	0.5	2	ZX-7010	
C106D1	400	4	2.2	200	0.8	3	ZX-7006	
C122E / MCR8M / BT151	500	8	1.8	25mA	1	30	ZX-7012	PRI
/ 51131								J
7		Volta	ge	Cat.		Qty 1+ Qt	y 10+ Qt	ty 25

71	Voltage	Cat.	Qty 1+	Qty 10+	Qty 25+
BT169D	400V	ZX-7010	\$2.60	\$2.30	\$1.80
CI06D1	400V	ZX-7006	\$2.50	\$2.21	\$1.75
C122E / MCR8M / BT151	500V	ZX-7012	\$4.45	\$3.95	\$2.95

TRIACs

	_						
Туре	Vmax	IE(A)	VF(V)	IG(mA)	VG(V)	Hold In(mA)	Cat.
SC141D	400	6	2	50	2.5	50	ZX-7141
SC151D	400	15	1.6	50	2	50	ZX-7145
TAG225	400	5	2	25	2.5	25	ZX-7147
BT137X	600	8	1.65	25	1.5	<20	ZX-7149*

*Note: 7X-7149 is isotah - mounting tah is dielectrically isolated

Note: 27-7145 is isotab - mounting tab is dielectrically isolated.								
7	Voltage	Cat.	Qty 1+	Qty 10+	Qty 25+			
SC141D	400V	ZX-7141	\$4.45	\$3.95	\$2.95			
SC151D	400V	ZX-7145	\$5.50	\$4.90	\$3.75			
TAC225	400V	ZX-7147	\$3.50	\$3.15	\$2.45			
BT137X	400V	ZX-7149	\$3.20	\$2.83	\$2.15			

TO-220

Qty 100+

\$0.80

\$0.80

\$0.80

\$0.80

\$0.80

\$0.80

\$0.80

\$0.80

DIAC

100

· Will trigger most devices above with a suitable timing circuit (DO-41)

250

200

Max Current (mA)

Type VCO	IFmax	ISW	VSW	Cat.	Qty 1+	Qty 10+	Qty 25+
ST2 3.5V	5mA	27	35V	ZX-7192	\$1.50	\$1.35	\$1.05

RN-3430

RN-3432

\$1.35

\$1.35

\$0.90

\$0.90

THERMISTORS

Negative Temperature Coefficient Thermistors

These devices are made of a special ceramic material which changes resistance value rapidly with temperature increase. They are commonly used to check thermal runaway in bipolar transistor amplifiers etc, but really have dozens of other uses. They are rugged and very reliable.

• Resistance at 25°C +/- 10%

• Dissipation

- Resistance at 25°C +/- 10%
 Temperature Range -20°C ~ +125°C
 Radial type, dipped epoxy
 Radial type, dipped epoxy

 Case 5mm diameter
 Thermal dissapation constant: 6mW/°C

- Radial type, dipped epoxy
 Thermal
 Type-NTC Ceramic material with tinned copper lead
- Dissipation (MAX) 500mW

y	500	100	RN-3434	\$1.35	\$0.90
ľ	1k	80	RN-3436	\$1.35	\$0.90
J	4.7k	45	RN-3438	\$1.35	\$0.90
	10k	30	RN-3440	\$1.35	\$0.90
1	47k	20	RN-3442	\$1.35	\$0.90
	100k	15	RN-3444	\$1.35	\$0.90

CRYSTALS

Crystals

Freq Tolerance: +/- 30Hz per 1MHz. Operating Temp: -20 to +70°C. Load Capac: 30pF typ. Note: Will be stocking low profile case types when old stock is exhausted.



- Used in remote control circuits
- Supplied as a pair

7	Cat.	Qty 1+	Qty 10+	Qty 25+
27.095MHz	RQ-5275	\$8.95	\$6.25	\$5.25
27.125MHz	RQ-5276	\$8.95	\$6.25	\$5.25
27.145MHz	RQ-5277	\$8.95	\$6.25	\$5.25
27.175MHz	RQ-5278	\$8.95	\$6.25	\$5.25
27.195MHz	RQ-5279	\$8.95	\$6.25	\$5.25



Freq.(MHz)	WxDxH(mm)	Case M	ax ESR	Cat.	Qty 1+	Qty 10+	Qty 25+
2.00	10x3.5x13	HC18K	500Ω	RQ-5268	\$3.50	\$3.15	\$2.75
3.2768	10x3.5x13	HC49U	90Ω	RQ-5271	\$3.50	\$3.15	\$2.75
3.5795	10x3.5x13	HC49U	90Ω	RQ-5272	\$3.50	\$3.15	\$2.75
4.000	10x3.5x13	HC49U	70Ω	RQ-5274	\$3.50	\$3.15	\$2.75
4.433619	10x3.5x3.5	HC49US	70Ω	RQ-5284	\$3.50	\$3.15	\$2.75
6.00	10x3.5x13	HC49U	60Ω	RQ-5285	\$3.50	\$3.15	\$2.75
8.00	11.5x4.65x4	HC49US	30Ω	RQ-5287	\$3.50	\$3.15	\$2.75
10.00 (P)	10x3.5x13	HC49U	30Ω	RQ-5289	\$3.50	\$3.15	\$2.75
12.00	11.5x4.65x13.5	HL49U	30Ω	RQ-5293NEW	\$3.50	\$3.15	\$2.75
20.00	11.5x4.65x4	HC49US		RQ-5299	\$3.50	\$3.15	\$2.75
32.768kHz		DT38		RQ-5297 NEW		\$3.15	\$2.75
38kHz Mini	3x8.5		40Ω	RQ-5298	\$3.50	\$3.15	\$2.75

HALL EFFECT SWITCHES

Hall Effect Sensor

UGN3503U HALL EFFECT SENSOR IC A miniature sensor to accurately track extremely small changes in magnetic flux density - changes generally too small to operate Hall effect switches. Applications include notch sensor, current monitor, gear tooth sensor, etc.



Operating voltage	4.5 - 6VDC
Supply current	Typ. 9mA
Output voltage	Typ. 2.5V DC
Output resistance	50Ω
Size	4.5(W) x 4.5(H) x 1.5(D)mm

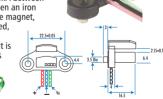
Qty 1+ Qty 10+ Qty 25+ Cat. UGN3503U ZD-1902





HKZ-101 Hall Effect Switch

This device is a rugged Hall effect switch designed for automotive ignition applications. This device consists of a Hall effect semiconductor sensor apprictions. This device consists of a half effect selfillofloutor sensor separated across a small gap by a magnet. In its normal state the Hall sensor (with inbuilt output transistor) is conducting. It will sink up to 40mA between the impressive temperature range of -40 to +150 degrees C. When an iron vane is introduced into the gap between the Hall element and the magnet, the output transistor switches off. The sensor is hermetically sealed, resistant to petroleum products and incorporates metal bushed mounting holes to facilitate fitting to a carrier plate, bracket etc. It is ideal as the commutator for an electronic ignition; however it has many other usage areas. Lead connections: Red V+. Black earth, Green signal (on/off).



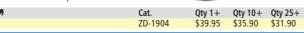
Cat. Qty 1+ Qty 25+ ZD-1900

PRESSURE SENSOR

Pressure Differential Sensor

The ZD-1904 piezo resistive pressure sensor provides a very accurate and linear voltage output directly proportional to the applied pressure. The sensor housed a single monolithic silicon die with a strain gauge and thin film resistor network on each chip

- 0°C to 85°C temperature compensation
- 0 to 10kPa (0 to 1.45 psi)
- 25mV full scale span



SEMICONDUCTOR DATA

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www.jaycar.com.au/semiconductor and search for the part you need data for.





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Electronics Books

ELECTRONIC BOOKS

Electronics Demystified

Part of the popular Demystified series, this book teaches you electronics theory, it does not include projects. If you have enjoyed the Short Circuits or Fun Way Project books and want to know more, this is your next book. It places all that project experience on a sound technical grounding. It avoids heavy mathematical formulae, but, be warned

there are equations in this book. They are not seriously hard though! The book starts at simple DC circuits, goes through AC circuits, impedance, reactance, power supply concepts, semiconductor basics, amplifiers, oscillators, RF, telecommunications and finishes on antennas. At the end of each chapter is a straightforward quiz (multiple choice) to make sure you are on top of concepts. This is the bestwritten technical book on novice to moderately advanced electronics we have seen. Read this book and understand it - you are a serious techo.









309 Circuits Book

Companion to the popular 308 circuits with many useful designs in audio, video, car, computer, hobby, home, test, power supplies, chargers and more. The book is divided into categories to help find circuits easier. Each circuit has a diagram and a photo of the finished

• Softcover, 428 pages, 240 x 184mm



Otv 1-

Qty 1+



electronics



Programming & Customising the PIC Microcontroller

Tap into the latest advances in PIC technology with the fully revamped third edition of this brilliant book. Certainly the definitive text on the subject, this indispensable volume comes with more than 600 illustrations and provides comprehensive, easy-to-understand coverage of the PIC microcontroller's hardware and software schemes. With 100 experiments, projects and libraries, you get a firm grasp of PICs, how they work and the ins-and-outs of their most dynamic applications. This updated edition features a streamlined, more accessible format and concentrates on the three major PIC families to help you fully understand Assembly, BASIC, and C programming languages. It also covers the latest program development tools and includes a refresher in electronics and programming as well as reference material.

BM-2470

Topics covered:

- Setting up your own PIC microcontroller development lab
- PIC MCU basics
 PIC microcontroller interfacing capabilities,
- software development, and applications
- Useful tables and data · Basic electronics
- Digital electronics
 BASIC reference
- C reference
- 16-bit numbers
- Useful circuits and routines to get your applications up & running
- Softcover
- 1263 pages





at	Otv

BT-1347

PIC Microcontroller Project Book (2nd Edition)

This book is completely updated and revised from the popular first edition. It is a fantastic book for those who really want to get into

microcontrollers, particularly the popular 16F84. It shows you how to install compilers (in BASIC) into your computer so you can program the PICS. Once you have done that you can learn more about PICS in general with several 'primer' chapters. Later in the book you will be presented with "real world" projects such as speech synthesisers; DC motor and stepper and servo motor control; use of sensors etc.

- 12 projects in all. 290+ pages.
- Softcover.
- Dimensions 230(H) x 185(W)mm.





By M C Sharma. The 741 OP amp IC is very inexpensive yet is comparable to the best in respect of versatility and performance. We can't list every one of the 41 kits but here are a few examples: inverting and non-inverting AC and DC amps, crystal, magnetic, guitar, telephone and mic preamps, 3W and 12W amps, intercom, AC and DC motor control, schmitt trigger, square wave generator, flasher, timer light op relay, DC voltmeter, AC millivoltmeter, RPM counter, A to D converter, etc.

Soft cover, 37 Pages 140 x 210 mm.





RM-2430 \$7.50

555 Timer & Its Applications

The 555 Timer IC is probably the most used IC in the world. It gives accurate timing range of micro seconds to hours. This book describes the functions and operation of the 555, then explains 21 projects to build using the IC. Some of these include photo timer, touch plate controller, car wiper control, car lights turn off, flashers, generators, delays auto power on and off, Ni-Cd charger, frequency divider, light operated relay, etc. An ideal book for the electronic hobbyist and experimenter.

• Soft cover, 43 pages 138 x 208 mm.



71	Cat.	Qty 1+
	RM-2466	\$7.00

Manufacturer's Type Codes - Alphabetical - Volume 1

This mastive book includes all devices with alphabetic manufacturer's type codes starting from A thru to Z and listing nearly 100,000 codes and 190,000 comparisons and equivalents. 2040 pages of information (335 PAGES MORE THAN THE PREVIOUS EDITION) are contained in this Softcover book measuring 147 x 107 x 62mm thick!





Semiconductor Equivalents Book - Volume 2

This book includes all devices with numeric manufacture's type codes starting with 0, then on thru 1, 1N, 2N, 2SK etc. and lists over 39,000 codes and 90,000 comparisons and equivalents. The book contains 1304 pages of information, (68 PAGES MORE THAN THE PREVIOUS

- Softcover.
- Measures 147 x 107 x 50mm thick!





7	Cat.	Qty 1+
	BM-4580	\$39.95
	RM-4582	\$39.95

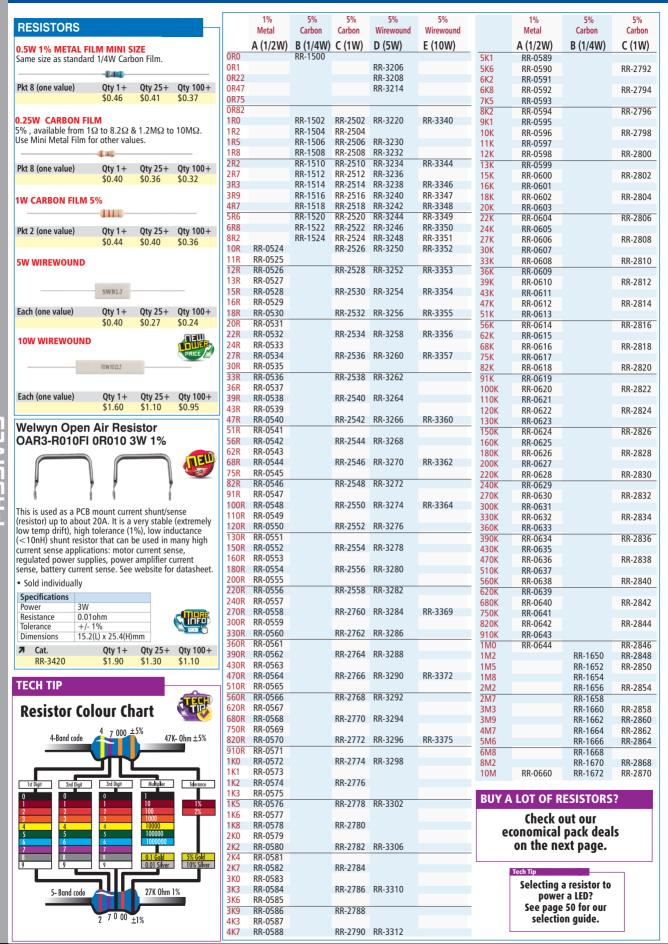
DID YOU KNOW...

Albert Einstein (1879 - 1955)

Einstein was a German-born theoretical physicist who developed the theory of general relativity, effecting a revolution in physics. For this achievement, Einstein is often

regarded as the father of modern physics. He received the 1921 Nobel Prize in Physics "for his services to theoretical physics, and especially for his discovery of the law of the photoelectric effect". The latter was pivotal in establishing quantum theory within physics.





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PROTOTYPE RESISTOR PACKS

0.25 Watt Carbon Film Resistors

300 Pieces



This pack includes five of virtually each value from This pack includes five of virtually each value from 1Ω to 10 Meg. Sixty different values. All resistors are bandoleered for easy sorting. Values supplied are 1Ω , 1.5, 2.2, 3.3, 4.7, 5.6, 10, 12, 15, 22, 27, 33, 39, 47, 56, 68, 82, 100, 120, 180, 220, 270, 330, 470, 560, 680, 820, 1k, 1k2, 1k5, 1k8, 2k2, 3k3, 3k9, 4k7, 5k6, 8k2, 10k, 12k, 15k, 18k, 22k, 27k, 33k, 39k, 47k, 56k, 68k, 82k, 100k, 120k, 150k, 220k, 270k, 330k, 470k, 1M, 100k, 120k, 150k, 220k, 270k, 330k, 470k, 1M,2M7, 4M7 & 10M.

7	Cat.	Qty 1+	Qty 25+	Qty 100+
	RR-1680	\$6.95	\$4.75	\$4.15

Ultimate Resistor Pack



Top quality, guaranteed 1/4 watt 5% miniature sized carbon film. In fact, they look like 1/8W, they are so small. This pack gives you almost every resistor in the E24 range (eg. 1.8K, 2.0K, 2.2K). You get 10 of every value, a total of 170 values, 1700 resistors in all and they are bandoleered for easy sorting.

Buy this pack and you should NEVER be short of any resistor again. Massive savings over normal costs.

7	Cat.	Qty 1+	Qty 25+	Qty 100+
	RR-2000	\$29.95	\$20.70	\$17.70

0.5W 1% Mini Size Metal Film Pack



This pack includes five of each value from 10 Ω to 1 Meg. Have that 1% resistor when you need it. Five of each of the following values supplied. 10Ω , 12, 15, 22, 27, 33, 39, 47, 56, 68, 75, 82, 100, 120, 180, 220, 270, 330, 390, 470, 560, 680, 820, 910, 1k, 1k2, 1k8, 2k2, 3k3, 3k9, 4k7, 5k6, 6k8, 8k2, 10k, 12k, 15k, 18k, 22k, 27k, 33k, 39k, 47k, 56k, 68k, 82k, 91k, 100k, 120k, 150k, 180k, 200k, 220k, 270k, 330k, 390k, 470k, 560k, 750k & 1M. Total 60 values - 300

You know exactly what you are getting when you buy our resistor packs.



7	Cat.	Qty 1+	Qty 25+	Qty 100+
	RR-0680	\$14.95	\$13.45	\$11.95

The Easy Way to Buy 0.25 Watt **Carbon Film Resistors**



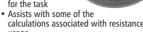
This pack includes 10 of every value of 1/4W 5% carbon film resistors from 1 Ω to 10M Ω . This is the E12 range, which goes like this - 10, 12, 15, 18, 22, 27, 33, 39, 47, 56, 68, 82, 100. Total values supplied is 85, giving a total of 850 resistors. Resistors are bandoleered for easy sorting. A great way to never be out of that odd resistor and save a packet at the same time.

7	Cat.	Qty 1+	Qty 25+	Qty 100+
	RR-1697	\$14.95	\$10.35	\$8.75

Resistor Substitution Wheel

36 VALUES Convenient resistance selection. Select from 36 values ranging from 5 ohms to 1 megaohms.





- usage Comes complete with leads and insulated
- alligator clips. Uses 0.25W resistors with 5% tolerance

7	Cat.	Qty 1+	Qty 25+	Qty 100+
	RR-0700	\$24.95	\$22.35	\$19.70

Light Dependent Resistor (LDR)

Cadmium sulphide (CdS) light dependent resistor cell.

Specifications		
Dark resistance	0.5M ohm min.	
Light resistance	2.8k ohm min	
	8.4k ohm max.	
Max dissipation	100mW	
Rise time	(0-63%) 50mS	
Decay time	(100 - 37%) 40mS	THE STATE OF THE S
Dimensions	8.5mm x 10.14mm	
Lead spacing	7.68mm.	PRILE

Cat. Qty 1+ Qty 25+ Qty 100+ RD-3485

Light Dependent Resistor (LDR)

Cadmium Sulphide (CdS) light dependent resistor cell. Similar to Philips ORP12

Specifications	
Dark resistance	min10MΩ
Light resistance	48k - 140kΩ
Max dissipation	30mW
Rise time	(0~63%) 40mS
Decay time	(100~37%) 10mS
Dimensions	5.1mm x 4.3mm ±0.2
Lead spacing	3.4mm

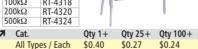


TRIMPOTS

Horizontal Mini Trimpots

OPEN CARBON TYPE

Value	Cat.	
500Ω	RT-4304] ,, (((())
1kΩ	RT-4306	
2kΩ	RT-4308	
5kΩ	RT-4310	
10kΩ	RT-4312	-
20kΩ	RT-4314	Towns of the last
50kΩ	RT-4316	-
100kΩ	RT-4318	
200kΩ	RT-4320	
500kΩ	RT-4324	



Vertical Trimpots 5mm

0	PEN CAR	BON TYPE	-	8	
	Value	Cat.	1 7		
	200Ω	RT-4006	,, (((())	
	500Ω	RT-4008	11		
	1kΩ	RT-4010			
	2kΩ	RT-4012			
	5kΩ	RT-4014	4	$ \perp \perp $	
	10kΩ	RT-4016	<u> </u>	$\psi - \psi$	2.3
	20kΩ	RT-4018		5	
	50kΩ	RT-4020			
	100kΩ	RT-4022		· ·	-
	250kΩ	RT-4024		ř	The Paris
	500kΩ	RT-4026			
	1MΩ	RT-4028			
	2MΩ	RT-4029			
7	Cat.		Qty 1+	Qty 25+	Qty 100+
	All Typ	es / Fach	\$0.40	\$0.27	\$0.24

25 Turn Cermet (3296W)

These are 25 turn industrial quality sealed trimpots. Pins are in a row, with 2.5mm spacing.

Adjustment is vertical.

500

5K

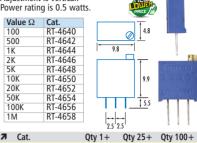
10K

20K

50K

1M

7



\$1.70

\$2.45 Trimpot Cermet 1 Turn 10kΩ (3386P)

- Single turn
- 10kO
- 10% tolerance



All Types / Each

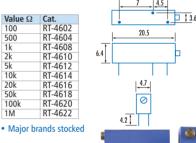




Cat.	Qty 1+	Qty 25+	Qty 100+
RT-4600	\$1.45	\$0.99	\$0.85

Multiturn Cermet (3006P)

0.75 watts @ 70%. Horizontal side adjustment.
• 15-20 turns.





7	Cat.	Qty 1+	Qty 25+	Qty 100+
	All Types / Each	\$1.60	\$1.10	\$0.95

For Trimmer Capacitors see page 80.

Piher Style Horizontal 5mm

At last, a range of top quality sealed mini, standard sized trimpots.

• Dust proof enclosure

- Polyester substrate
- Wiper positioned at 50%
- Accidental rotor movement protected
- Max voltage 100V / Nom power 0.1W
- Linear curve
- Tolerance +/- 30%
- End resistance 10Ω carbon type.

Value Ω	Cat.	- 8.7	<u>′</u> —∣	
200	RT-4350	5.4		T9700
500	RT-4352	1 ~ <u>T</u> L_	╗	6.4
1K	RT-4354	5.4	T 114P	1400
2K	RT-4356	<u> </u>	5 25	Ĭ
5K	RT-4358	5.	3 3.25	
10K	RT-4360		Contract of the Contract of th	
20K	RT-4362		-	• -
50K	RT-4364			2
100K	RT-4366			• •—
250K	RT-4368		1	15
500K	RT-4370			, , ,
1M	RT-4372		y	
Cat.		Qty 1+	Qty 25+	Qty 100+
All Type	es / Each	\$0.98	\$0.65	\$0.55

POTENTIOMETERS

9mm Square PCB Mounting

These pots are rapidly becoming the industry standard for miniaturised audio, digital and telecommunications equipment. This series features good solder bath immersion resistance, 300° rotation and standard 18 tooth metric pre-cut actuator shafts. Two popular metric knobs are now carried, however metric knobs are now commonly available. Both single and dual gang types are stocked in log and linear resistance tapers.

Electrical	Linear Taper (B)	Other Taper
Rated Wattage	0.05W	0.02W
Rated Voltage	50VAC	50VAC
Slider Noise	<100mV	
Insulation Resistance	$>$ 100M Ω at 250VDC	
Dielectric	300VAC/Minute	
Tracking Error	Within 3dB at 40~0dB	

Mechanical	
Rotation Angle:	300° +/-5°
Rotation Torque:	20~250gf.cn
Shaft Stop Strength:	5kgf.cm/min.

LOG SINGLE GANG (A)

Value	Cat.	Qty 1+	Qty 10+	Qty 50+
10k	RP-8610	\$2.75	\$2.15	\$1.90
50k	RP-8616	\$2.75	\$2.15	\$1.90



HOLE CUTOUT Ø6.7

LINEAR SINGLE GANG (B)

Value	Cat.	Qty 1+	Qty 10+	Qty 50+
1k	RP-8504	\$2.75	\$2.15	\$1.90
10k	RP-8510	\$2.75	\$2.15	\$1.90
50k	RP-8516	\$2.75	\$2.15	\$1.90
100k	RP-8518	\$2.75	\$2.15	\$1.90
1M	RP-8524	\$2.75	\$2.15	\$1.90



LOG DOUBLE GANG (A)

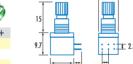
Value	Cat.	Qty 1+	Qty 10+	Qty 50+
10k	RP-8756	\$3.95	\$3.15	\$2.75
50k	RP-8760	\$3.95	\$3.15	\$2.75



2.3 PIN SPACING

LINEAR DOUBLE GANG (B)

			-,	
Value	Cat.	Qty 1+	Qty 10+	Qty 50+
10k	RP-8706	\$3.95	\$3.15	\$2.75
50k	RP-8710	\$3.95	\$3.15	\$2.75
100k	RP-8712	\$3.95	\$3.15	\$2.75



HOLE CUTOUT Ø6.7

16mm PCB Mounting

These pots have imperial standard shaft.

- Shaft is 1/4" D type (30% of shaft has been removed for flat), so they suit all our knob range. Shaft length is 30mm.
- Power rating Linear 0.2W and Log 0.1W.
 Supplied with nut and washer

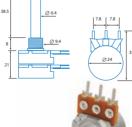


LOG SINGLE GANG (A)

Value	Cat.	Qty 1+	Qty 10+	Qty 50+
1K	RP-7604	\$1.95	\$1.55	\$1.35
10K	RP-7610	\$1.95	\$1.55	\$1.35
50K	RP-7616	\$1.95	\$1.55	\$1.35

LINEAR SINGLE GANG (B)

	Value	Cat.	Qty 1+	Qty 10+	Qty 50+
	1K	RP-7504	\$1.95	\$1.55	\$1.35
	5K	RP-7508	\$1.95	\$1.55	\$1.35
	10K	RP-7510	\$1.95	\$1.55	\$1.35
	50K	RP-7516	\$1.95	\$1.55	\$1.35
	100K	RP-7518	\$1.95	\$1.55	\$1.35
ı	1M	RP-7524	\$1.95	\$1.55	\$1.35
ı					



LOG DOUBLE GANG (A)

Value	Cat.	Qty 1+	Qty 10+	Qty 50+
10K	RP-7756	\$2.75	\$2.15	\$1.90

LINEAR DOUBLE GANG (B)

Value	Cat.	Qty 1+	Qty 10+	Qty 50+
50K	RP-7708	\$2.75	\$2.15	\$1.90
100K	RP-7712	\$2.75	\$2.15	\$1.90

Double Gang

Freecall order hotline: 1800 022 888

24mm PCB Mounting

With imperial standard shaft & bushings made to our rigid engineering specifications. The potentiometers are full size - 24mm diameter types . Power rating is 0.5W max. They have genuine 6.35mm (1/4") shafts with a flat machined 25% of the diameter for grubscrews or interference fit knob mounting. The shaft is a generous 38mm long. The bush is a 3/8" 32 T.H.D. type which we believe is necessary for good fixing to a panel. Another important feature of the pots is their PCB mount capability. The pins are rigidly mounted on phenolic with the centre pin offset from the two outer terminals. When soldered into a PCB, the pot is quite rigidly held on its own. Double gang pots are held in 6 places and require no extra mechanical mounting assistance. The pins are large enough to terminate screened cable, etc., if the job requires hard wiring.

- We have stocked this product for over 10 years now and have no intention of changing it. You can therefore confidently design around this product.
 Supplied with nut and washer

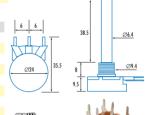
LOG SINGLE GANG (A)

Value	Cat.	Qty 1+	Qty 10+	Qty 50+
1k	RP-3604	\$2.25	\$1.80	\$1.55
5k	RP-3608	\$2.25	\$1.80	\$1.55
10k	RP-3610	\$2.25	\$1.80	\$1.55
25k	RP-3614	\$2.25	\$1.80	\$1.55
50k	RP-3616	\$2.25	\$1.80	\$1.55
100k	RP-3618	\$2.25	\$1.80	\$1.55
250k	RP-3620	\$2.25	\$1.80	\$1.55
500k	RP-3622	\$2.25	\$1.80	\$1.55
1M	RP-3624	\$2.25	\$1.80	\$1.55



LINEAR SINGLE GANG (B)

Value	Cat.	Qty 1+	Qty 10+	Qty 50+
500R	RP-3502	\$2.25	\$1.80	\$1.55
1k	RP-3504	\$2.25	\$1.80	\$1.55
5k	RP-3508	\$2.25	\$1.80	\$1.55
10k	RP-3510	\$2.25	\$1.80	\$1.55
25k	RP-3514	\$2.25	\$1.80	\$1.55
50k	RP-3516	\$2.25	\$1.80	\$1.55
100k	RP-3518	\$2.25	\$1.80	\$1.55
250k	RP-3520	\$2.25	\$1.80	\$1.55
500k	RP-3522	\$2.25	\$1.80	\$1.55
1M	RP-3524	\$2.25	\$1.80	\$1.55

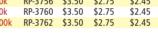




LOG DOUBLE GANG (A)

/alue	Cat.	Qty 1+	Qty 10+	Qty 50+
l 0k	RP-3756	\$3.50	\$2.75	\$2.45
50k	RP-3760	\$3.50	\$2.75	\$2.45
100k	RP-3762	\$3.50	\$2.75	\$2.45







LINEAR DOUBLE GANG (B)

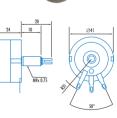
Value	Cat.	Qty 1+	Qty 10+	Qty 50+	
10k	RP-3706	\$3.50	\$2.75	\$2.45	
25k	RP-3708	\$3.50	\$2.75	\$2.45	
50k	RP-3710	\$3.50	\$2.75	\$2.45	
100k	RP-3712	\$3.50	\$2.75	\$2.45	

5 Ohm 15W Wirewound

Specifications	
Resistance	5 Ohms
Resistance curve	Linear (B)
Rated wattage	15 Watts
Shaft	Spline (metric)
Body measures	41mm OD x 24mm Depth
Shaft Length	20mm; 9.0mm hole required
Lugs	Solder Type
Total rotation angle	300° +/-5°
Rotation Torque	70~400gf.cm
Stopper Strength	10kgf.cm







RP-3975 \$9.95 \$7.75 \$6.75	7	Cat.	Qty 1+	Qty 10+	Qty 50+
		RP-3975	\$9.95	\$7.75	\$6.75

Potentiometer Nuts

Packet of 12 nuts and washers to suit our pots



7	Thread	Cat	Qty 1+	Qty 10+	Qty 50+
24mm	3/8" 32THD	RP-3500	\$2.85	\$2.53	\$2.23
16mm	Metric	RP-7500	\$2.85	\$2.53	\$2.23

PLASTIC KNOBS















HK-7713





HK-7715



HK-7709





HK-7717 HK-7711

FLUTED PLASTIC WITH POINTER SLOT AND SKIRT Grubscrew fixing - brass insert. Suit 0.25"/6.35mm shaft.

HK-7707

7	Colour	Ø x H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
	Black	16 x 19	HK-7760	\$1.30	\$1.15	\$1.01
	Black	20 x 16	HK-7762	\$1.85	\$1.65	\$1.45
	Black	24 x 20	HK-7764	\$2.20	\$1.95	\$1.75
	Black	35 x 19	HK-7766	\$2.95	\$2.60	\$2.30

PUSH ON - COLOURED CAP Suit 0.25"/6.35mm shaft.

1							
2	7 Colour	Ø x H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+	
	Red	18 x 20	HK-7705	\$0.85	\$0.75	\$0.65	
	Yellow	18 x 20	HK-7713	\$0.85	\$0.75	\$0.65	
	Black	18 x 20	HK-7707	\$0.85	\$0.75	\$0.65	
	White	18 x 20	HK-7715	\$0.85	\$0.75	\$0.65	
	Blue	18 x 20	HK-7709	\$0.85	\$0.75	\$0.65	
	Grey	18 x 20	HK-7717	\$0.85	\$0.75	\$0.65	
	Green	18 x 20	HK-7711	\$0.85	\$0.75	\$0.65	

BLACK PLASTIC WITH POINTER Brass ferrule insert. Suit 0.25"/6.35mm shaft.

7	Colour	Ø x H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
	Black	23 x 14	HK-7787	\$1.50	\$1.35	\$1.20

















HK-7549















METRIC Suits our 9mm Mini Potentiometers. Matches HK-7760/66 series Fits all standard metric shafts.

7	Colour	Ø x H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
	Black	15 x 14	HK-7770	\$1.50	\$1.35	\$1.20
	Black	20 x 16	HK-7772	\$1.85	\$1.65	\$1.45

SKIRT NUMBERED 1-10

Grubscrew fixing - brass ferrule insert. Suit 0.25"/6.35mm shaft.

7	Colour	Ø x H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
	Silver/Black	29 x 18	HK-7788	\$2.95	\$2.60	\$2.30
	Silver/Black	36 x 23.5	HK-7549	\$2.95	\$2.60	\$2.30

PUSH ON - 18T SPLINESuits our 9mm Mini Potentiometers. Matches HK-7760/66 series. Fits all standard metric shafts.

7	Colour	Ø x H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
	Grey/Red	13 x 18	HK-7730	\$0.95	\$0.85	\$0.75
	Grey/Yellow	13 x 18	HK-7731	\$0.95	\$0.85	\$0.75
	Grey/Green	13 x 18	HK-7732	\$0.95	\$0.85	\$0.75
	Grey/Blue	13 x 18	HK-7733	\$0.95	\$0.85	\$0.75
	Grey/White	13 x 18	HK-7734	\$0.95	\$0.85	\$0.75

PLASTIC POINTER

Juit	out 0.25 /0.55 mm shart.							
7	Colour	Ø x H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+		
	Black	19 x 32	HK-7700	\$1.35	\$1.20	\$1.05		

ALUMINIUM / PLASTIC INSERT KNOBS











BRUSHED ALUMINIUM

Ideal for HiFi projects. Suit 0.25"/6.35mm shaft.

7	Colour	Ø x H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
	Silver	16 x 14	HK-7020	\$2.75	\$2.45	\$2.15
	Silver	22 x 14	HK-7022	\$2.95	\$2.60	\$2.30

BLACK ANODISED ALUMINIUM

Grub screw fixing. Suit 0.25"/6.35mm shaft.

7	Colour	Ø x H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
	Black	16 x 14	HK-7009	\$2.75	\$2.45	\$2.15
	Black	22 x 14	HK-7010	\$2.95	\$2.60	\$2.30
	Black	29 x 14	HK-7011	\$3.95	\$3.45	\$3.15









BLACK PLASTIC WITH ALUMINIUM INSERT

White pointers - brass insert. Grub screw fixing. Suit 0.25"/6.35mm shaft.

1		IF	E	7
6	T	M		7
			v	

7	Colour	Ø x H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
	Silver/Black	20 x 18	HK-7786	\$2.20	\$1.95	\$1.75
	Silver/Black	27 x 15	HK-7740	\$1.50	\$1.35	\$1.20
	Silver/Black	32 x 17	HK-7741	\$1.85	\$1.65	\$1.45
	Silver/Black	45 x 20	HK-7742	\$3.45	\$3.05	\$2.75

Caution

When ordering knobs (from any supplier) double check that the knob you are getting will fit the shaft of the component you are using it with. For example a knob with a 6mm shaft hole will not accept a 1/4" shaft. As you are probably aware 1/4" equals 6.35mm. That 0.35mm is enough to render the knob unusable. So called "metric" knobs often have an 18 spline interference fit hole suitable only for push-on type aluminium shafts.

Note: Apart from metric, all knobs shown on this page fix to 0.25"/6.35mm shafts (with flat) unless otherwise stated



DID YOU KNOW...

Aristotle (384 - 322BC)

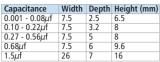
Aristotle was a Greek philosopher, student of Plato and teacher of Alexander the Great. Together with Plato and Socrates (Plato's teacher), Aristotle is one of the most important founding figures in

Western philosophy. Aristotle's writings were the first to create a comprehensive system of Western philosophy, encompassing morality and aesthetics, logic and science, politics and metaphysics. Aristotle's views on the physical sciences profoundly shaped medieval scholarship, and their influence extended well into the Renaissance, although they were ultimately replaced by Newtonian physics.

CAPACITORS

100VDC MKT Miniature Polyester

Rated voltage: 100VDC working, 40VAC 50/60Hz





-7						
Value (µF)	(nF)	Pitch (mm)	Cat.	Qty 1+	Qty 25+	Qty 100+
0.0010	1.0	5	RM-7010	\$0.35	\$0.24	\$0.21
0.0012	1.2	5	RM-7012	\$0.35	\$0.24	\$0.21
0.0015	1.5	5	RM-7015	\$0.35	\$0.24	\$0.21
0.0022	2.2	5	RM-7022	\$0.35	\$0.24	\$0.21
0.0027	2.7	5	RM-7027	\$0.35	\$0.24	\$0.21
0.0033	3.3	5	RM-7033	\$0.35	\$0.24	\$0.21
0.0039	3.9	5	RM-7039	\$0.35	\$0.24	\$0.21
0.0047	4.7	5	RM-7047	\$0.35	\$0.24	\$0.21
0.0068	6.8	5	RM-7055	\$0.35	\$0.24	\$0.21
0.010	10	5	RM-7065	\$0.35	\$0.24	\$0.21
0.012	12	5	RM-7070	\$0.35	\$0.24	\$0.21
0.015	15	5	RM-7075	\$0.35	\$0.24	\$0.21
0.018	18	5	RM-7080	\$0.35	\$0.24	\$0.21
0.022	22	5	RM-7085	\$0.35	\$0.24	\$0.21
0.033	33	5	RM-7095	\$0.35	\$0.24	\$0.21
0.039	39	5	RM-7100	\$0.35	\$0.24	\$0.21
0.047	47	5	RM-7105	\$0.35	\$0.24	\$0.21
0.056	56	5	RM-7110	\$0.35	\$0.24	\$0.21
0.068	68	5	RM-7115	\$0.35	\$0.24	\$0.21
0.082	82	5	RM-7120	\$0.40	\$0.27	\$0.24
0.10	100	5	RM-7125	\$0.40	\$0.27	\$0.24
0.12	120	5	RM-7130	\$0.40	\$0.27	\$0.24
0.15	150	5	RM-7135	\$0.45	\$0.30	\$0.25
0.18	180	5	RM-7140	\$0.45	\$0.30	\$0.25
0.22	220	5	RM-7145	\$0.45	\$0.30	\$0.25
0.27	270	5	RM-7150	\$0.65	\$0.45	\$0.37
0.33	330	5	RM-7153	\$0.65	\$0.45	\$0.37
0.39	390	5	RM-7159	\$0.65	\$0.45	\$0.37
0.47	470	5	RM-7165	\$0.65	\$0.45	\$0.37
0.56	560	5	RM-7166	\$0.85	\$0.57	\$0.50
0.68	680	5	RM-7168	\$0.85	\$0.57	\$0.50
1.00	1000	5	RM-7170	\$0.95	\$0.65	\$0.55
1.50	1500	23	RM-7172	\$1.25	\$0.85	\$0.75

250VDC Metallised Polypropylene

Ideal for speaker crossovers
 Axial

Metallised polypropylene
dielectric offers stable
capacitance over a wide temperature range. This,
and the relatively high capacitance for size makes
them ideal for high quality loudspeaker crossover networks. Naturally, they are also suitable for other applications where a stable, non polarised capacitive component is required.

JAYCAR	QUALITY
HIGH	QUALITY

CBB20 1.0µF K 250V

Value(μF)	W x D x H (mm)	Cat.	Qty 1+	Qty 5+	Qty 10+	
1.0	25 x 15.9 x 8.4	RY-6950	\$3.45	\$2.30	\$1.95	
1.5	29 x 17.2 x 9.6	RY-6951	\$4.45	\$2.95	\$2.60	
2.2	32 x 19.2 x 10.1	RY-6952	\$5.25	\$3.60	\$3.15	
3.3	32 x 22.2 x 13.0	RY-6953	\$6.95	\$4.75	\$4.15	
4.7	32 x 22.0 x 15.0	RY-6954	\$9.95	\$6.75	\$5.75	
5.6	46 x 20.0 x 12.0	RY-6955	\$10.95	\$7.50	\$6.50	
6.8	46 x 22.2 x 14.3	RY-6956	\$12.95	\$8.95	\$7.75	
8.2	46 x 23.0 x 16.0	RY-6957	\$14.95	\$10.35	\$8.75	
10.	56 x 29.0 x 20.7	RY-6958	\$16.95	\$11.70	\$9.95	

250VAC - Metallised Polypropylene - X2 Style



Voltage rating:

Capacitance tolerance:
Operating temperature:

















Freecall order hotline: 1800 022 888

Value(μF)	(nF)	Pitch (mm)	Cat.	Qty 1+	Qty 25+	Qty 100+
0.010	10	10	RG-5230	\$0.75	\$0.50	\$0.45
0.022	22	10	RG-5232	\$0.75	\$0.50	\$0.45
0.047	47	15	RG-5234	\$0.75	\$0.50	\$0.45
0.10	100	15	RG-5236	\$0.95	\$0.65	\$0.55
0.22	220	22.5	RG-5238	\$1.15	\$0.80	\$0.65
0.47	470	22.5	RG-5240	\$2.95	\$1.95	\$1.75

Greencaps Polyester or Mylar

• Supplied loose • Operating temperature: -40°C to +85°C



TOUVDC						
Value(μF)	(nF)	Pitch (mm)	Cat.	Qty 1+	Qty 25+	Qty 100+
0.0010	1.0	4	RG-5010	\$0.25	\$0.17	\$0.15
0.0012	1.2	4	RG-5012	\$0.25	\$0.17	\$0.15
0.0015	1.5	4	RG-5015	\$0.25	\$0.17	\$0.15
0.0018	1.8	4	RG-5018	\$0.25	\$0.17	\$0.15
0.0022	2.2	4	RG-5022	\$0.25	\$0.17	\$0.15
0.0027	2.7	4	RG-5027	\$0.25	\$0.17	\$0.15
0.0033	3.3	4	RG-5033	\$0.25	\$0.17	\$0.15
0.0039	3.9	4	RG-5039	\$0.25	\$0.17	\$0.15
0.0047	4.7	4	RG-5047	\$0.25	\$0.17	\$0.15
0.0056	5.6	4	RG-5050	\$0.25	\$0.17	\$0.15
0.0068	6.8	4	RG-5055	\$0.25	\$0.17	\$0.15
0.0082	8.2	4	RG-5060	\$0.25	\$0.17	\$0.15
0.010	10	4	RG-5065	\$0.25	\$0.17	\$0.15
0.012	12	5	RG-5070	\$0.25	\$0.17	\$0.15
0.015	15	5	RG-5075	\$0.25	\$0.17	\$0.15
0.018	18	5	RG-5080	\$0.25	\$0.17	\$0.15
0.022	22	5	RG-5085	\$0.25	\$0.17	\$0.15
0.027	27	5	RG-5090	\$0.25	\$0.17	\$0.15
0.033	33	5	RG-5095	\$0.25	\$0.17	\$0.15
0.039	39	6	RG-5100	\$0.25	\$0.17	\$0.15
0.047	47	6	RG-5105	\$0.25	\$0.17	\$0.15
0.056	56	6	RG-5110	\$0.25	\$0.17	\$0.15
0.068	68	7	RG-5115	\$0.25	\$0.17	\$0.15
0.082	82	7	RG-5120	\$0.25	\$0.17	\$0.15
0.10	100	7	RG-5125	\$0.25	\$0.17	\$0.15
0.12	120	8	RG-5130	\$0.25	\$0.17	\$0.15
0.15	150	9	RG-5135	\$0.25	\$0.17	\$0.15
0.18	180	9	RG-5140	\$0.25	\$0.17	\$0.15
0.22	220	9	RG-5145	\$0.25	\$0.17	\$0.15
0.27	270	10	RG-5150	\$0.35	\$0.24	\$0.21
0.33	330	11	RG-5153	\$0.35	\$0.24	\$0.21

100VDC LARGE VALUES

Suitable for speaker crossovers, etc.

Juituble 10	rattable for speaker crossovers, etc.									
Value(μF)	(nF)	Pitch (mm)	Cat.	Qty 1+	Qty 25+	Qty 100+				
0.47	470	11	RG-5165	\$0.35	\$0.24	\$0.21				
0.56	560	15	RG-5166	\$0.50	\$0.35	\$0.30				
0.68	680	11	RG-5168	\$1.50	\$1.05	\$0.90				
0.82	820	15	RG-5169	\$1.50	\$1.05	\$0.90				
1.00	1000	11	RG-5170	\$1.75	\$1.20	\$1.05				
1.50	1500	20	RG-5172	\$2.75	\$1.90	\$1.65				
2.20	2200	11	RG-5175	\$2.25	\$1.55	\$1.35				
3.30	3300	21	RG-5180	\$2.25	\$1.55	\$1.35				
4.70	4700	28	RG-5181	\$4.50	\$3.15	\$2.60				
10.00	10000	28	RG-5185	\$8.95	\$6.25	\$5.25				

DAVACE						
Value(μF)	(nF)	Pitch (mm)	Cat.	Qty 1+	Qty 25+	Qty 100+
0.010	10	9	RG-5201	\$0.45	\$0.30	\$0.25
0.022	22	9	RG-5202	\$0.55	\$0.37	\$0.32
0.033	33	14	RG-5203	\$0.85	\$0.57	\$0.50
0.047	47	10	RG-5204	\$0.85	\$0.57	\$0.50
0.047	47	14	RG-5205	\$0.85	\$0.57	\$0.50
0.10	100	14	RG-5210	\$1.25	\$0.85	\$0.75
0.22	220	14	RG-5222	\$1.25	\$0.85	\$0.75
0.47	470	26	RG-5247	\$1.75	\$1.20	\$1.05

CHIP QUIK SMD REMOVAL KIT

Desoldering SMD chips can be very tedious and risky. Most of the time you don't even bother due to the risk of destroying the component or lifting the tracks on the PCB. Chip Quick is a low melting point solder product that maintains the molten state of a row of pins. It even works on PLCC chips. Essential rework tool for anyone who uses SMD components.

• 1cc lead-free alloy kit will remove 8 - 10 SMD PLCC chips.



7	Cat.	Qty 1+	Qty 3+	Qty 10+
	NS-3050	\$29.95	\$26.90	\$23.70

CAPACITORS (CONTINUED)

SMD Tantalum Capacitors

Moulded solid tantalum chip capacitor, Moulded solid tantalum cnip capacitor, featuring small size, high capacitance, high reliability and excellent operation performances. Meets the requirements of EIA Standard 535BAAC.

Operating temp range: -55°C to 125°C T

35V - ALL SUPPLIED IN PACKS OF 10	w	ļ
Major brands All dimensions in mm		

Case Code	L	W	Н	S	W1
Α	3.2 ± 0.2	1.6 ± 0.2	1.6 ± 0.2	0.8 ± 0.3	1.2 ± 0.1
В	3.5 ± 0.2	2.8 ± 0.2	1.9 ± 0.2	0.8 ± 0.3	2.2 ± 0.1
C	6.0 ± 0.3	3.2 ± 0.3	2.5 ± 0.3	1.3 ± 0.3	2.2 ± 0.1
D	7.3 ± 0.3	4.3 ± 0.3	2.8 ± 0.3	1.3 ± 0.3	2.4 ± 0.1

6.3V - ALL SUPPLIED IN PACKS OF 10

Value(μF)	Case	ESR	Cat.	Qty 1+	Qty 25+	Qty 100+
4.7	Α	6/7	RZ-6538	\$3.95	\$2.75	\$2.30
10	Α	3/4	RZ-6541	\$3.95	\$2.75	\$2.30

10V - ALL SUPPLIED IN PACKS OF 10

V-1.../...T\ C---

value(µF)	case	ESK	Cat.	Qty I+	Qty 25+	Qty 100+
2.2	Α	7/15	RZ-6544	\$3.95	\$2.75	\$2.30
4.7	Α	4/5	RZ-6547	\$3.95	\$2.75	\$2.30
10	Α	2.5/3	RZ-6550	\$3.95	\$2.75	\$2.30
22	В	1.8/2.4	RZ-6553	\$3.95	\$2.75	\$2.30
100	C	0.9	RZ-6556	\$11.50	\$7.95	\$6.75

16V - ALL SUPPLIED IN PACKS OF 10

Value(μF)	Case	ESR	Cat.	Qty 1+	Qty 25+	Qty 100+
1	Α	11/20	RZ-6559	\$3.95	\$2.75	\$2.30
2.2	Α	5.5/6.5	RZ-6562	\$3.95	\$2.75	\$2.30
4.7	Α	3.5/4	RZ-6565	\$3.95	\$2.75	\$2.30
10	В	2/2.8	RZ-6568	\$4.65	\$3.15	\$2.75
22	C	1.1/1.6	RZ-6571	\$11.50	\$7.95	\$6.75
47	D	0.9/1.4	RZ-6574	\$11.50	\$7.95	\$6.75
100	D	0.9	R7-6577	\$13.95	\$9.75	\$8.25

25V - ALL SUPPLIED IN PACKS OF 10

value(μ F)	Case	ESK	Cat.	Qty 1+	Qty 25+	Qty 100+
0.47	Α	14	RZ-6580	\$3.95	\$2.75	\$2.30
1	Α	7/8	RZ-6583	\$3.95	\$2.75	\$2.30
2.2	В	4.5	RZ-6586	\$3.95	\$2.75	\$2.30
4.7	В	2.4	RZ-6589	\$5.95	\$4.15	\$3.45
10	C	1.2/1.8	RZ-6592	\$11.50	\$7.95	\$6.75
22	D	0.9	RZ-6595	\$11.50	\$7.95	\$6.75

35V - ALL SUPPLIED IN PACKS OF 10

Value(µF)	Case	ESR	Cat.	Qty 1+	Qty 25+	Qty 100+
0.1	Α	24	RZ-6598	\$3.95	\$2.75	\$2.30
0.22	Α	18	RZ-6601	\$3.95	\$2.75	\$2.30
0.47	Α	10/12	RZ-6604	\$3.95	\$2.75	\$2.30
1	Α	6.5	RZ-6607	\$3.95	\$2.75	\$2.30
2.2	В	3.5	RZ-6610	\$5.95	\$4.15	\$3.45
4.7	C	1.5/2.2	RZ-6613	\$11.50	\$7.95	\$6.75
10	D	1.0	RZ-6616	\$11.50	\$7.95	\$6.75

DID YOU KNOW...

Archimedes (287 - 212BC)

Archimedes is, no doubt, known for his law of buoyancy, better known as the Archimedes' principle. He was a pioneer in the field of physics, with his work in hydrostatics, and the

explanation of the working of a lever. He designed many innovative yet simple machines, which include the screw pump, and the claw (a kind of crane that could lift ships). A famous mathematician he gave the most approximate value of 'pi'.

Tag Tantalum Thru-Hole

- Resin dipped case
- Price per each5mm lead spacing



16V

Value(μF)	Pitch (mm)	Cat.	Qty 1+	Qty 25+	Qty 100+
4.7	5.0	RZ-6636	\$0.60	\$0.40	\$0.35
6.8	5.0	RZ-6642	\$0.95	\$0.65	\$0.55
10	5.0	RZ-6648	\$0.95	\$0.65	\$0.55
15	5.0	RZ-6657	\$0.95	\$0.65	\$0.55
22	5.0	RZ-6658	\$0.95	\$0.65	\$0.55
33	5.0	RZ-6665	\$2.25	\$1.55	\$1.35
17	5.0	R7-6670	¢1 Q5	¢1 35	¢1 15

Value(µF)	Pitch (mm)	Cat.	Qty 1+	Qty 25+	Qty 100+
1.0	5.0	RZ-6627	\$0.60	\$0.40	\$0.35
10	5.0	RZ-6650	\$0.95	\$0.65	\$0.55

35V

Value(μF)	Pitch (mm)	Cat.	Qty 1+	Qty 25+	Qty 100+
0.10	5.0	RZ-6620	\$0.60	\$0.40	\$0.35
0.22	5.0	RZ-6622	\$0.60	\$0.40	\$0.35
0.33	5.0	RZ-6624	\$0.60	\$0.40	\$0.35
0.47	5.0	RZ-6626	\$0.60	\$0.40	\$0.35
1.0	5.0	RZ-6628	\$0.60	\$0.40	\$0.35
1.5	5.0	RZ-6630	\$0.60	\$0.40	\$0.35
2.2	5.0	RZ-6632	\$0.60	\$0.40	\$0.35
4.7	5.0	RZ-6640	\$0.75	\$0.50	\$0.45
6.8	5.0	RZ-6645	\$0.95	\$0.65	\$0.55
10	5.0	R7-6655	\$0.95	\$0.65	\$0.55

PROTOTYPE PACKS - CAPACITORS

· Ideal for prototyping



CAT. RC-5399 **CERAMIC PACK OF 60**



CAT. RM-7190 MKT PACK OF 50

SMD ELECTROLYTIC PACK OF 50 20 values Cat. RE-5959













ELECTROLYTIC PACK OF 55

CAT. RG-5199

CAT. RE-6250



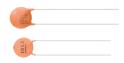
nnınırır					
Value(μF)	Pack	Cat.	Qty 1+	Qty 25+	Qty 100+
10pF to 0.10μF	60	RC-5399	\$7.95	\$5.50	\$4.75
0.001 to 0.22	60	RG-5199	\$9.50	\$6.50	\$5.50
0.001 to 0.47	50	RM-7190	\$12.50	\$8.75	\$7.50
1 to 470	55	RE-6250	\$11.95	\$10.70	\$9.50
4.7 to 470	50 NEW	RE-5959	\$12.95	\$8.95	\$7.75
0.1 to 100	30 NEW	R7-6618	¢12 Q5	¢2 Q5	¢7 75



50V Ceramic

 $\begin{array}{l} 1 \text{pF} - 10 \text{pF} \pm 1/4 \text{pF} \\ 12 \text{pF} - 100 \text{pF} \pm 5\% \\ 120 \text{pF} - 0.022 \mu \text{F} \pm 10\% \text{ (Y5P)} \\ 0.033 \mu \text{F} - 0.1 \mu \text{F} \pm 20\% \text{ (Y5U)} \end{array}$

- 5mm lead spacing Low inductance



Value	Cat.	Value	Cat.
(pF)	Pkt 2		Pkt 2
1.0	RC-5300	120pF	RC-5325
1.2	RC-5301	150pF	RC-5326
1.5	RC-5302	180pF	RC-5327
1.8	RC-5303	220pF	RC-5328
2.2	RC-5304	270pF	RC-5329
2.7	RC-5305	330pF	RC-5330
3.3	RC-5306	390pF	RC-5331
3.9	RC-5307	470pF	RC-5332
4.7	RC-5308	560pF	RC-5333
5.6	RC-5309	680pF	RC-5334
6.8	RC-5310	820pF	RC-5335
8.2	RC-5311	1000pF	RC-5336
10	RC-5312	2200pF	RC-5340
12	RC-5313	3300pF	RC-5342
15	RC-5314	4700pF	RC-5344
18	RC-5315	5600pF	RC-5345
22	RC-5316	6800pF	RC-5346
27	RC-5317	8200pF	RC-5347
33	RC-5318	0.01μ F	RC-5348
39	RC-5319	0.022μ F	RC-5352
47	RC-5320	0.033μ F	RC-5354
56	RC-5321	0.047μ F	RC-5356
68	RC-5322	0.1μF	RC-5360
82	RC-5323		
100	RC-5324		

Pkt 2			Qty 1+	Qty 25+	Qty 100+
All RC Cat Nos (Pl	ct 2)		\$0.32	\$0.22	\$0.19
0.22μF 220N					
7		Cat.	Qty 1+	Qty 25+	Qty 100+
(Each)		RC-5364	\$0.50	\$0.35	\$0.30

50VDC Monolithic

Lead spacing 5mm, low impedance



7	Value (μF)	Pkt	Cat.	Qty 1+	Qty 25+	Qty 100+
	0.01	each	RC-5480	\$0.28	\$0.19	\$0.16
	0.022	each	RC-5482	\$0.28	\$0.19	\$0.16
	0.047	each	RC-5486	\$0.28	\$0.19	\$0.16
	0.10	each	RC-5490	\$0.28	\$0.19	\$0.16
	0.10	100	RC-5496	\$7.95	\$5.50	\$4.75
	0.22	each	RC-5494	\$0.32	\$0.22	\$0.19
	0.47	each	RC-5498	\$0.60	\$0.40	\$0.35
	1.0	each	RC-5499	\$0.60	\$0.40	\$0.35

50VDC Bi-Polar RB Electrolytic - 85°C





	Size	Pitch	Ripple				
Value	(mm)	(mm)	(mA)	Cat.	Qty 1+	Qty 25+	Qty 100+
1.0μF	5 x 11	2.0	8	RY-6802	\$0.48	\$0.32	\$0.27
2.2μ F	5 x 11	2.0	20	RY-6804	\$0.48	\$0.32	\$0.27
3.3μ F	5 x 11	2.0	25	RY-6805	\$0.48	\$0.32	\$0.27
4.7μ F	5 x11	2.0	30	RY-6806	\$0.48	\$0.32	\$0.27
6.8µF	5 x 11	2.0	40	RY-6808	\$0.48	\$0.32	\$0.27
10μF	6.3 x 11	2.5	48	RY-6810	\$0.48	\$0.32	\$0.27
22μ F	8 x 11	3.5	82	RY-6816	\$0.85	\$0.57	\$0.50
33μ F	8 x 11	3.5	98	RY-6818	\$0.95	\$0.65	\$0.55
47μ F	8 x 11	3.5	140	RY-6820	\$1.35	\$0.90	\$0.80
100μF	10 x 20	5.0	245	RY-6825	\$2.45	\$1.70	\$1.45

3kV High Voltage Ceramic

Value 0.01μ F.



Value(μF) Qty 100+ 0.01 RC-5380 \$2.50 \$1.50

100VDC Non-Polarised Crossover Type - 85°C

This range is ideal for crossover networks and will handle high power but are suitable for other applications of course. The range includes large values - up to 400µF, (required for subwoofers). All capacitors have RT or axial leads



7	Value μ F	Ø x L (mm)	Cat.	Qty 1+	Qty 5+	Qty 10+
	1	8 x 17	RY-6901	\$1.85	\$1.25	\$1.10
	2.2	8 x 17	RY-6902	\$1.85	\$1.25	\$1.10
	3.3	8 x 19	RY-6903	\$1.95	\$1.35	\$1.15
	4.7	8 x 19	RY-6904	\$1.95	\$1.35	\$1.15
	6.8	10 x 19	RY-6906	\$2.25	\$1.55	\$1.35
	10	10 x 19	RY-6908	\$2.25	\$1.55	\$1.35
	15	10 x 19	RY-6910	\$2.45	\$1.70	\$1.45
	22	10 x 24	RY-6912	\$2.85	\$1.95	\$1.70
	33	13 x 27	RY-6914	\$3.45	\$2.30	\$1.95
	47	13 x 32	RY-6916	\$4.45	\$2.95	\$2.60
	68	16 x 34	RY-6918	\$4.95	\$3.45	\$2.90
	100	16 x 34	RY-6920	\$6.45	\$4.45	\$3.75
	150	18 x 38	RY-6924	\$9.95	\$6.75	\$5.75
	220	18 x 44	RY-6928	\$11.95	\$8.25	\$6.95
	300	22 x 44	RY-6932	\$16.95	\$11.70	\$9.95
	400	22 x 44	RY-6936	\$18.95	\$12.95	\$11.35

2.5V Super Capacitors - 22 & 55 Farad

These specially engineered capacitors are actually a high-tech energy storage device not the standard capacitors which they look identical to. Using a new combination manufacturing process where nano surface structured carbon is combined with organic electrolytes, this technique enables these capacitors to store 1,000 times the energy of a standard electrolytic capacitor. The main applications are energy storage at a circuit board level replacing the bulkier secondary batteries which are currently used. Essentially anywhere high energy storage is needed.

- High density of energy Long lifetime (10 years) High cycle life (over 500,000 cycles)



7	Value F	Ø x H (mm)	Cat.	Qty 1+	Qty 25+	Qty 100+
	22	12 x 25	RE-6702	\$12.95	\$8.95	\$7.75
	55	18 x 40	RF-6704	\$16.95	\$11.70	\$9.95

5.5V Super Capacitor - 0.047 Farad & 1 Farad

Super capacitors are a standby power source capable of providing up to 30 days back-up voltage & current to CMOS RAMs during power failures. Never needs replacing or maintenance

- · Can be soldered onto PCBs
- Can be charged at high & low current rates
- i.e. microamps to amps
 5mm lead spacing

7	Value F	Ø x H (mm)	Cat.	Qty 1+	Qty 25+	Qty 100-
	0.047	13 x 7.5	RU-6700	\$5.50	\$3.75	\$3.30
	1.0	20 x 7.5	RU-6705	\$4.95	\$3.45	\$2.90

Motor Start Capacitors

We have sourced a range of motor start capacitors necessary for starting single phase induction motors. These are suitable for motors operating at up to 400VAC and common values are offered here.

Please note it is important to choose the correct value for the motor otherwise the starting torque of the motor

will change. Two different packages are provided. For the higher valued capacitors it's necessary to use the different case style which provides the important AMP250A terminals and an inbuilt safety device.



7 Capacitance (µF)	W x D x H (mm)	Cat	Qty 1+	Qty 25+	Qty 100+
6.0	49 x 21 x 31	RU-6600	\$14.95	\$10.35	\$8.75
10	50 x 25 x 36	RU-6602	\$14.95	\$10.35	\$8.75
12	50 x 30 x 40	RU-6604	\$14.95	\$10.35	\$8.75
20	40 x 75	RU-6606	\$14.95	\$10.35	\$8.75
30	40 v 95	RII-6608	\$14.95	\$10.35	\$8.75

CAPACITORS (CONTINUED) PC Mount RB Electrolytic - 105°C 10V Value Pitch ØxH Ripple (µF) Otv 1+ Qty 25+ Qty 100+ (mm) (mm) Current mA Cat 6.5 x 11 180 RE-6157 \$0.30 \$0.21 16V Value Pitch ØxH Ripple Otv 25+ (μF) Otv 1+ Otv 100+ (mm) (mm) Current mA Cat. 2.0 RE-6066 \$0.26 \$0.18 5 x 11 45 \$0.15 2.0 5 x 11 60 RE-6079 \$0.26 \$0.18 \$0.15 100 RE-6100 \$0.30 \$0.21 \$0.18 100 6.3 x 1 170 RE-6130 \$0.30 \$0.21 \$0.18 2.5 220 8 x 12 280 RE-6158 \$0.35 \$0.24 \$0.21 3.5 330 3.5 8 x 12 360 RE-6188 \$0.45 \$0.30 \$0.25 470 3 5 8 x 16 460 RF-6194 \$0.55 \$0.37 \$0.32 RE-6220 \$0.80 1000 5.0 10 x 16 760 \$0.55 \$0.45 5.0 13 x 23 1250 RF-6238 \$0.95 \$0.65 \$0.55 4700 16 x 26 1960 RE-6243 \$1.25 \$1.05 25V Value Pitch ØхН Ripple (μF) (mm) Current mA Cat. Qty 1+ Qty 25+ Qty 100+ (mm) 2.0 RE-6070 \$0.30 5 x 11 \$0.21 2.0 70 RE-6090 \$0.30 \$0.21 \$0.18 5 x 11 33 2.0 5 x 11 95 RF-6095 \$0.30 \$0.21 \$0.18 47 2.5 5 x 11 120 RF-6110 \$0.30 \$0.21 \$0.18 100 2.5 6.3 x 11 180 RF-6140 \$0.40 \$0.27 \$0.24 220 RE-6160 \$0.40 3.5 8 x 12 320 \$0.27 \$0.24 330 5.0 10 x 13 420 RE-6190 \$0.65 \$0.45 \$0.37 470 540 RE-6195 \$0.70 \$0.47 \$0.40 5.0 10 x 16 1000 5.0 13 x 20 900 RE-6230 \$1.05 \$0.70 \$0.60 2200 13 x 26 1460 RE-6240 \$0.90 \$0.80 RE-6244 \$2.85 4700 7.5 16 x 35 2150 \$1.95 \$1.70 50V Value Pitch ØхН Ripple (μF) (mm) (mm) Current mA Cat. Qty 1+ Otv 25 Qty 100+ 4μ7 2.0 5 x 11 35 RE-6058 \$0.28 \$0.19 \$0.16 RF-6180 \$0.90 220 5.0 10 x 17 430 \$0.60 \$0.52 2200 7.5 16 x 35 1900 RF-6241 \$2.95 \$1.95 \$1.75 22 x 40 RE-6245 \$5.10 4700 10 2280 \$3.45 \$2.95 63V Value Pitch ØxH Ripple (μF) (mm) (mm) Current (mA) Cat. Qty 1+ Qty 25+ Qty 100+ RF-6020 μ47 2.0 5 x 11 8 \$0.26 \$0.18 \$0.15 RE-6032 \$0.26 \$0.18 \$0.15 1μ 2.0 5 x 11 15 \$0.26 2µ2 2.0 5 x 11 22 RE-6042 \$0.18 \$0.15 RE-6045 3*u*3 2.0 5 x 11 30 \$0.26 \$0.18 \$0.15 $4\mu7$ 2.0 5 x 11 40 RE-6060 \$0.30 \$0.21 \$0.18 10 2.0 5 x 11 RE-6075 \$0.30 \$0.21 \$0.18 100 RE-6080 \$0.30 \$0.21 22 6.3 x 11 \$0.18 47 3.5 8 x 12 180 RE-6122 \$0.40 \$0.27 \$0.24 100 5.0 8 x 16 280 RE-6150 \$0.75 \$0.50 \$0.45 470 5.0 13 x 25 ጸጸበ RE-6210 \$1.30 \$0.90 \$0.75 1000 16 x 26 1400 RE-6236 \$2.05 \$1.40 \$1.20 105°C Electrolytic Capacitors Our range of RB PC mount electrolytics up to 63 Volt are 105°C rated. This makes for more reliable service. Consider this when making price comparisons with competitors' 85°C products. PC Mount RB Electrolytic - 85°C 35V

High Voltage RB Electrolytic 85°C rated 450V * RE-6156 is 400V rated Value Pitch ØxH Ripple (µF) (mm) (mm) Current (mA) Cat. Otv 1-Otv 25+ Otv 100+ 10 x 14.5 12 RE-6034 \$1.50 3.5 \$1.05 \$0.90 RE-6044 \$1.50 2μ2 5.0 10 x 17 28 \$1.05 \$0.90 10 x 20.5 48 RE-6062 \$2.25 4μ7 5.0 \$1.55 \$1.35 5.0 13 x 21.5 75 RE-6078 \$3.00 \$2.07 \$1.80 10 17 8 0 17.5 x 36 285 RE-6125 \$6.50 \$4.45 \$3.90 100 13 18 x 42.5 521 RE-6156* \$7.20 \$4.95 \$4.30

Low ESR Capacitors

ESR means Equivalent Series Resistance.

Ordinary electrolytics are constructed in such a way that they can be quite "leaky", i.e. will conduct a small amount of DC current.
They also have a fairly high impedance. This is not a problem if they are just used to filter 50 or 100Hz pulsating DC in a linear power supply. It is a problem if there is a high repetition pulse on, say, a switchmode DC supply line that needs to be filtered. A pulse train of, say, 50kHz will be virtually "ignored" by a standard electrolytic. A low device has the ability to integrate the pulses into a smooth DC rail, and as a bonus not heat up in the process.

Low Impedance* or ESR1 Capacitors Stable, low impedance characteristics High ripple current** Low DC leakage current Extended life - high reliability withstanding 2.000 to 4.000 hours load life at 105°C Radial leads on standard pitch *Impedance: max at 20°C 100kHz **Ripple current measured at 105°C 100kHz. ¹Equivalent Series Resistance 10VDC Value ØxH Impedance Ripple Current (μF) (mm) Ω* (mA) RMS Cat. Qty 1+ Qty 100+ Qty 25+ 6.3 x 12 0.22 340 RE-6300 \$0.36 \$0.25 \$0.21 470 8 x 11 0 13 640 RF-6302 \$0.44 \$0.39 \$0.35 1210 RF-6304 \$0.75 1000 10 x 16 0.06 \$0.50 \$0.45 0.05 1900 RF-6306 \$0.80 \$0.65 2200 10 x 16 \$1.15 RE-6308 4700 0.028 2552 \$1.15 13 x 24 \$1.95 \$1.35 16VDC Value ØxH **Impedance Ripple Current** (μF) (mm) Ω* (mA) RMS Cat. Qty 1+ Qty 25+ Qty 100+ RE-6310 100 6.3 x 11 0.22 340 \$0.36 \$0.30 \$0.27 0.13 640 RE-6312 \$0.40 \$0.27 \$0.24 8 x 11 0.087 840 RE-6314 \$0.75 \$0.65 \$0.60 470 8 x 16 1000 10 x 20 0.046 1400 RE-6316 \$1.10 \$0.75 \$0.65 2200 16 x 25 0.035 2210 RE-6318 \$1.40 \$0.95 \$0.80 0.022 RE-6320 4700 16 x 32 3029 \$2.50 \$1.50 25VDC Value ØxH Impedance **Ripple Current** (μF) (mm) Ω* (mA) RMS Cat. Qty 1+ Qty 25+ Qty 100+ 0.22 RE-6322 8 x 11 340 \$0.44 \$0.39 \$0.35 640 \$0.44 220 RE-6324 \$0.39 \$0.35 8 x 12 0.13470 0.060 1210 \$0.84 \$0.65 10 x 16 RE-6326 \$0.75 1000 13 x 20 0.035 1900 RE-6328 \$1.30 \$0.90 \$0.75 2200 16 x 25 0.022 2743 RE-6330 \$0.95 35VDC Value **Ripple Current** ØxH Impedance (μF) (mm) Ω^* (mA) RMS Cat. Qty 1+ Qty 100+ RE-6332 6.3 x 11 0.22 340 \$0.36 \$0.30 \$0.27

	Pitch	ØxH	Ripple				
(μF)	(mm)	(mm)	Current mA	Cat.	Qty 1+	Qty 25+	Qty 100+
22	5.0	5 x 11	80	RE-6092	\$0.30	\$0.21	\$0.18

100

220

470

1000

63VDC Value ØxH

(μF) (mm)

47

100

220

470

8 x 11

10 x 16

10 x 20

16 x25

6.3 x 11

8 x 11.5

10 x 20

10 x 20

16 x 20

0.13

0.09

0.046

0.035

Impedance

 Ω^*

0.70

0.30

0.12

0.060

0.043

640

840

1400

2552

Ripple Current

(mA) RMS

180

295

760

1220

1690

RF-6334

RE-6336

RE-6338

RE-6340

RE-6342

RF-6344

RF-6346

RF-6348

RF-6350 \$1.50

Cat.

\$0.44

\$0.70

\$1.20

\$1.65

Qty 1+

\$0.36

\$0.44

\$0.84

\$1.10

\$0.39

\$0.47

\$0.80

\$1.15

Qty 25+

\$0.30

\$0.39

\$0.75

\$0.75

\$0.35

\$0.40

\$0.70

\$0.95

Qty 100+

\$0.27

\$0.35

\$0.65

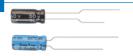
\$0.65

\$0.90

CAPACITORS (CONTINUED)

RBLL Low Leakage Electrolytic

- 85°C rated
- Leakage characteristic similar to tantalum caps. but at a lower price



1+ Qty 25+ Qty 100+
55 \$0.37 \$0.32
55 \$0.37 \$0.32
70 \$0.47 \$0.40
95 \$0.65 \$0.55
5

50V						
Value	Lead (mm)	Size (mm)				
(μF)	Spacing	ØxH	Cat.	Qty 1+	Qty 25+	Qty 100+
$0\mu1$	2.0	5 x 11	RL-6402	\$0.40	\$0.27	\$0.24
$0\mu^{22}$	2.0	5 x 11	RL-6406	\$0.40	\$0.27	\$0.24
$0\mu 33$	2.0	5 x 11	RL-6408	\$0.40	\$0.27	\$0.24
0μ47	2.0	5 x 11	RL-6410	\$0.40	\$0.27	\$0.24
$0\mu 68$	2.0	5 x 11	RL-6412	\$0.40	\$0.27	\$0.24
$1\mu0$	2.0	5 x 11	RL-6414	\$0.40	\$0.27	\$0.24
1μ 5	2.0	5 x 11	RL-6418	\$0.40	\$0.27	\$0.24
2μ 2	2.0	5 x 11	RL-6420	\$0.40	\$0.27	\$0.24
3μ 3	2.0	5 x 11	RL-6422	\$0.40	\$0.27	\$0.24
4μ7	2.0	5 x 11	RL-6424	\$0.40	\$0.27	\$0.24
10	2.5	6.3 x 11	RL-6428	\$0.55	\$0.37	\$0.32

RP Electrolytic

This style of capacitor is distinguished because, whilst bulky, does not need a chassis clamp. Fixing is by the stout lead wires. While soldered retention is generally adequate. For applications where vibration is an issue a dab of silicone under the component is recommended.

• 85°C rated



40V

Value	Ripple						
(μF)	Current(A)	Size (mm)	Rated	Cat.	Qty 1+	Qty 25+	Qty 100+
5600	2.4	26 x 42	85°C	RU-6709	\$7.95	\$5.50	\$4.75
10000	2.7	26 x 51	85°C	RU-6720	\$9.95	\$6.75	\$5.75

RG Chassis Mount Electrolytic

85°C rated



Value	Voltage	Ripple	Size (mm)						
(μF)	(V)	Current(A)	ØxH	Cat.	Qty 1+	Qty 25+	Qty 100+		
4000	75	4.6	35 x 51	RU-6708	\$9.95	\$6.75	\$5.75		
8000	80	3.47	35 x 76	RU-6710	\$12.95	\$8.95	\$7.75		
10000	100	8.1	50 x 80	RU-6712	\$24.95	\$17.35	\$14.70		
All supplied with mounting bracket. Height and diameter column excludes lugs - 8mm.									

TRIMMER



Capacitance(pF)	Temp Coeff	Colour	Cat.	Qty 1+	Qty 25+	Qty 100+
3-10	N470	White	RV-5714	\$1.45	\$0.99	\$0.85
6.2-30	N750	Green	RV-5716	\$1.45	\$0.99	\$0.85
6.8-40	N1200	Yellow	RV-5718	\$1.45	\$0.99	\$0.85
9.8-50	N1200	Brown	RV-5720	\$1.45	\$0.99	\$0.85

8.5-100pF Ceramic Trimmer

•					
Specifications					
Working voltage	225VDC.				
Insulation resistance	$>$ 104M Ω min	7.4		PIN SPACING	
	at 250VDC.			15.5	
Withstand voltage	500VDC.	***	F-31	67	he little
Temperature coefficient	N2200.	1 -112			
Colour	Purple				
7 Voltage		Cat.	Qty 1-	+ Qty 25-	+ Qty 100+
225VDC		RV-572	22 \$2.25	\$1.55	\$1.35
Colour Voltage	500VDC. N2200.		Qty 1	+ Qty 25	

Freecall order hotline: 1800 022 888

SMD Electrolytic

Supplied in packs of 10

Operating temperature range | -40°C to +105°C JISC-5141 & JISC-5102 Standards



10V IN PACKS OF 10

Value(μF)	Size mm	Ripple Current (mA)	Cat.	Qty 1+	Qty 25+	Qty 100+
22	5 x 5.4	25	RE-5900	\$4.75	\$3.30	\$2.75
47	6.3 x 5.4	41	RE-5903	\$4.75	\$3.30	\$2.75
100	6.3 x 5.4	53	RE-5906	\$4.75	\$3.30	\$2.75
220	6.3 x 7.7	105	RE-5909	\$7.95	\$5.50	\$4.75
470	8 x 10.5	210	RE-5912	\$7.95	\$5.50	\$4.75

16V IN PACKS OF 10

Value(μF)	Size mm	Ripple Current (mA)	Cat.	Qty 1+	Qty 25+	Qty 100+
10	4 x 5.4	18	RE-5915	\$3.95	\$2.75	\$2.30
22	5 x 5.4	27	RE-5918	\$3.95	\$2.75	\$2.30
47	6.3 x 5.4	48	RE-5921	\$4.50	\$3.15	\$2.60
100	6.3 x 5.4	60	RE-5924	\$4.75	\$3.30	\$2.75
220	6.3 x 7.7	105	RE-5927	\$7.95	\$5.50	\$4.75

25V IN PACKS OF 10

Value(μF)	Size mm	Ripple Current (mA)	Cat.	Qty 1+	Qty 25+	Qty 100+
4.7	4 x 5.4	13	RE-5930	\$4.75	\$3.30	\$2.75
10	5 x 5.4	20	RE-5933	\$4.75	\$3.30	\$2.75
22	6.3 x 5.4	36	RE-5936	\$4.75	\$3.30	\$2.75
47	6.3 x 5.4	48	RE-5939	\$7.95	\$5.50	\$4.75
100	6.3 x 7.7	91	RE-5942	\$7.95	\$5.50	\$4.75
220	8 x 10.5	175	RE-5945	\$7.95	\$5.50	\$4.75

35V IN PACKS OF 10

Value(μF)	Size mm	Ripple Current(mA)	Cat.	Qty 1+	Qty 25+	Qty 100+
4.7	4 x 5.4	14	RE-5948	\$4.75	\$3.30	\$2.75
10	5 x 5.4	21	RE-5951	\$4.75	\$3.30	\$2.75
22	6.3 x 5.4	38	RE-5954	\$4.75	\$3.30	\$2.75
47	6.3 x 7.7	49	RE-5957	\$4.75	\$3.30	\$2.75
100	8 x 10.5	155	RF-5960	\$7.95	\$5.50	\$4.75

50V IN PACKS OF 10

Value(μF)	Size mm	Ripple Current(mA)	Cat.	Qty 1+	Qty 25+	Qty 100+
1.0	4 x 5.4	7	RE-5963	\$4.75	\$3.30	\$2.75
2.2	4 x 5.4	11	RE-5964	\$4.75	\$3.30	\$2.75
4.7	5 x 5.4	16	RE-5966	\$4.75	\$3.30	\$2.75
10	6.3 x 5.4	24	RE-5967	\$4.75	\$3.30	\$2.75
22	6.3 x 7.7	51	RE-5969	\$4.75	\$3.30	\$2.75
47	6.3 x 7.7	63	RE-5970	\$7.95	\$5.50	\$4.75

Capacitor Quick Reference Chart

			41
Use	Cap.	Cat.	Page 💜
RF	Ceramic	RC-5XXX	78
AUDIO	MKT	RM-7XXX	76
SMPS	Low ESR	RE-63XX	79
PSU	Electrolytic	RE-60XX	79
CROSSOVER	Poly/Electrolytic	RY-69XX	78
MOTOR	Motor Start	RU-66XX	78

CAPACITOR TYPE

These offer low cost and high capacitance in a small physical size. Normally there are two types, the 'High Stability Temperature Compensating' type and the 'Bypass and Coupling' type. The former for use in resonant circuit and filter applications, with a value largely independent of voltage and frequency. The latter is for use in less critical applications, as they are less stable and have non-linear temperature characteristics and are somewhat voltage dependent. **Polyester:**

These type offer good stability, a large range of values at low cost, and are the most widely used capacitor for general purpose. Polycarbonate:

These have a low temperature coefficient, low dielectric loss at high frequency and excellent temperature stability characteristics. Polystyrene:

These offer tight tolerance and are highly stable; making them suitable for very stable tuned circuits and oscillators. Polypropylene:

This type has a very low dielectric loss and are particularly suitable in audio circuits and sample-and-hold circuits.

Mylar:

This is the Du Pont tradename for polyester. They usually have an aluminium film deposit on the dielectric and are called "metallised polyester".

EMC - RFI Suppression

FERRITES

Ferrite Bead

These small tubes can be threaded on to a wire to provide RF or interference suppression at frequencies higher than the normal operating range of the equipment to be protected.





7	Length (mm)	Pkt	Cat	Qty 1+	Qty 25+	Qty 100+
	5.0	6	LF-1250	\$2.95	\$1.95	\$1.75

Ferrite Suppression Sleeves

Similar to suppression beads (see above) but longer for greater attenuation.

Cat.	Typical Impedance	
	(Z)@25MHz	(Z)@100MHz
LF-1256	52	66
LF-1258	130	200
LF-1260	161	255





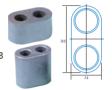
7	Length (mm)	A (mm)	B (mm)	Pkt	Cat	Qty 1+	Qty 25+	Qty 100+
	16	8.0	5.6	6	LF-1256	\$3.95	\$3.45	\$3.15
	20	12	5.6	6	LF-1258	\$5.50	\$4.90	\$4.30
	29	16	8.0	6	LF-1260	\$6.50	\$5.75	\$4.95

Standard Transformer (Balun) Cores

Generally used in VHF/UHF circuits for balanced or unbalanced line matching. Can also be used as a lossy choke, etc

Material:
 Insertion Loss:

Type M7 40-220MHz 0.5dB > 220MHz 1.0dB



7	Length (mm)	Pkt	Cat.	Qty 1+	Qty 25+	Qty 100+
	6.0	2	LF-1222	\$1.95	\$1.75	\$1.55
	14	2	LF-1220	\$1.95	\$1.75	\$1.55

Ferrite Flat Bar

- Short and compact.
- Ideal for MW tuned circuits
- Frequency: 0.5 10MHz
 Also suitable for suppression work .



7	L x W x D (mm)	Cat	Qty 1+	Qty 25+	Qty 100+
	40 x 12 x 5	LF-1016	\$1.75	\$1.20	\$1.05

Ferrite Rounds

- 9mm diameter. Material S-1
- · Ideal for MW tuned circuits or suppression work



7	Ø x W (mm)	Cat	Qty 1+	Qty 25+	Qty 100+
	9 x 100	LF-1010	\$1.75	\$1.20	\$1.05
	9 x 180	LF-1012	\$3.95	\$2.75	\$2.30

Ferrite Rod With Coil

Small ferrite rod complete with pre-wound standard broadcast band coil. Ideally suitable to our 60-160pf mini tuning capacito



٠.					
7	L x W x D (mm)	Cat	Qty 1+	Qty 25+	Qty 100+
	55 x 12 5 x 4 5	LF-1020	\$2.75	\$1.90	\$1.65

High Frequency Ferrite Choke

PCB mounting ferrite chokes suitable for frequency circuits.



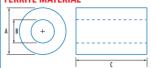
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7	Inductance	Pitch (mm)	Cat.	Qty 1+	Qty 25+	Qty 100+
	47μH	5.0	LF-1100	\$0.60	\$0.40	\$0.35
	100μH	5.0	LF-1102	\$0.60	\$0.40	\$0.35
	220µH	5.0	LF-1104	\$0.60	\$0.40	\$0.35
	330μH	5.0	LF-1106	\$0.60	\$0.40	\$0.35
	470µH	5.0	LF-1108	\$0.60	\$0.40	\$0.35

Toroid (or Ring) Cores

Toroid (both ferrite and powered iron) are commonly used as cores for transformers or chokes mainly for RF suppression but also for any application where a compact reactive component is needed.

> Drawing for both ferrite and powdered iron types See website for more info

FERRITE MATERIAL





MATERIAL L8 SIZE 18(A) X 10(B) X 6(C) (MM)

7	Pkt	Cat	Qty 1+	Qty 25+	Qty 100+
	6	LO-1230	\$2.50	\$1.75	\$1.50

MATERIAL L8 SIZE 25(A) X 15(B) X 10(C) (MM)

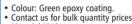
4	₹ Pkt	Cat	Qty 1+	Qty 25+	Qty 100+
	4	LO-1234	\$3.95	\$2.75	\$2.30

MATERIAL L15 SIZE 35(A) X 21(B) X 13(C) (MM)

7	Pkt	Cat	Qty 1+	Qty 25+	Qty 100+
	2	LO-1238	\$3.95	\$2.75	\$2.30

Powdered Iron Cores

These toroids are made out of compressed powdered iron and coated with a tough epoxy material. They are ideal for RF suppression of light dimmers, motor speed controllers, switch mode power supplies etc.



Material HY-2





A x B x C (mm)	Pkt	Cat	Qty 1+	Qty 25+	Qty 100+	
15 x 8 x 6.5	4	LO-1242	\$4.95	\$3.45	\$2.90	
28 x 14 x 11	2	LO-1244	\$3.95	\$2.75	\$2.30	
42 x 22 x 17	1	LO-1246	\$6.95	\$4.75	\$4.15	

Through Hole EMC/RFI Suppression Chokes

Ideal for all wideband choke applications. Highly effective against EMI/RFI entering equipment via the mains power lines. Powdered iron core.





Specifications	LF-1270	LF-1272	LF-1274	LF-1276	LF-1278
RDC m Ω	50	25	25	60	82
Wire Dia mm	1.0	0.8	1.0	1.0	1.0
Dimension A mm	26	21	24.5	28.5	31
Dimension B mm	25	10	10	10	10
Dimension C mm	13	10.5	10	13	17
Industance /ul	I) CHERON	+ /A\	Cat	Oty 1	O+ν 21

-	<u></u>
LF-1278	
82	The state of the s
1.0	
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17	

7	Inductance (µH)	Current (A)	Cat	Qty 1+	Qty 25+	Qty 100+
	100	3A	LF-1272	\$2.95	\$1.95	\$1.75
	100	5A	LF-1270	\$2.95	\$1.95	\$1.75
	47	5A	LF-1274	\$2.95	\$1.95	\$1.75
	220	5A	LF-1276	\$4.95	\$3.45	\$2.90
	470	5A	LF-1278	\$5.95	\$4.15	\$3.45

SMD Type EMC/RFI Suppression Chokes

These popular devices complement our wire terminated LF-1270 style ferrite chokes. Good suppression of RF-EMÍ from DC/DC converters or any circuit which generates commutation noise etc. which needs to be suppressed to meet regulations Supplied in bags of 10 cut from a tape reel.





Specifications	LF-1400	LF-1402
Inductance	100uH+/-10%	100uH+/-20%
Series DC resistance (RDC)	0.99Ω	179.6mΩ max
Rated DC current	520mA	1.8A
Size	5.8 x 4.5mm	12 x 12 x 8mm

- 1			8
		100	A
1	-	1/	
•	-	200	
IF-1400			

7	Pkt	Cat.	Qty 1+	Qty 25+	Qty 100+
	10	LF-1400	\$5.95	\$4.15	\$3.45
	10	LF-1402	\$9.95	\$6.75	\$5.75

FERRITES (CONTINUED)

Flat Cable Suppression Sleeves

These devices are designed to suppress high frequency (fast rise time) interference (radiation) to and from PC boards, printers, disk drives etc. The ferrite makes the cable behave like a high impedance choke at high frequencies



FOR 16 WAY RIBBON CABLE

7	Typical Impedance	25MHz	100MHz	Cat	Qty 1+	Qty 25+	Qty 100+
Pkt	2 Sets	54Ω	120Ω	LF-1280	\$4.95	\$4.45	\$3.90

FOR 26 WAY RIBBON CABLE

7	Typical Impedance	25MHz	100MHz	Cat	Qty 1+	Qty 25+	Qty 100+
Per	Set	38Ω	91Ω	LF-1284	\$5.95	\$5.25	\$4.75

FOR 50 WAY RIBBON CABLE (Supplied as a pair with clip)

₹ Typical Impedance 25MHz 100MHz LF-1286 \$10.95 72Ω 190Ω \$7.50

Round Cable Suppression Sleeves



Basically a split high permeability ferrite core with a plastic case, these devices are ideal where parasitic voltage spikes or RF breakthrough are a problem or potential problem. The cores come in a hinged plastic case, simply snap on to the computer or data cable. Three versions are offered which cover most computer leads etc. For extra security, lock assembly together with a cable tie.

TYPICAL IMPEDANCE VS FREQUENCY (Rise Time of Interference Signal)



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Model	Cable Dia	1MHz	25MHz	50MHz	100MHz	300MHz	500MHz
U-25	12.5	10Ω	150Ω	200Ω	250Ω	290Ω	200Ω
U-16	8.2	20Ω	100Ω	200Ω	220Ω	150Ω	<100Ω
U-15	7.0	<10Ω	160Ω	220-250Ω	280Ω	300+Ω	245Ω

MODEL U25:

This offers impedance (peak approx 300Ω at 2-300MHz) with negligible impedance below 1MHz. Plastic case measures 32L x 30mm square. It will take a lead up to 12mm (1/2") diameter but preferably 10mm.

7	Cat.	Qty 1+	Qty 25+	Qty 100+
Each	LF-1290	\$7.75	\$5.25	\$4.60



MODEL 1116:

A compact attenuator that will pass a cable up to 8mm dia (most monitor cables etc). Typical impedance at 25MHz 300 Ω approx 590 Ω at 100MHz dropping off after that. Case measures 20Lx19Dia mm.

7	Cat.	Qty 1+	Qty 25+	Qty 100-
Pkt 4	LF-1292	\$9.95	\$6.75	\$5.75

MODEL U15:

This model is for 7mm dia cable or smaller.

· Offers good protection up to 500MHz.

7	Cat.	Qty 1+	Qty 25+	Qty 100+
Pkt 2	LF-1294	\$7.95	\$5.50	\$4.75



PLEASE NOTE:

· Full specifications available on website.

If the cable can be looped through the core twice or more (obviously only for thinner cables) the attenuation is increased substantially.



POT CORE & BOBBIN

This handy sized pot core set is made from low loss material and is equivalent to the original Philips FX 2240 part.

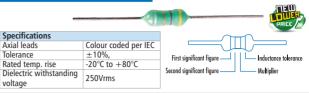
- Size (each half): 26(OD) x 11.5(ID) x 8(H)mm
 • Material: FP4



Freecall order hotline: 1800 022 888

Pot Core - pair LF-1060	Qty 1+	Qty 25+	Qty 100+
Pot Core - pair LF-1060			
	\$4.95	\$3.45	\$2.90
Bobbin to suit LF-1062	\$0.85	\$0.57	\$0.50

RF CHOKES



(μH) DC	(Ω) Rated	DC Current	Cat.	(μH) DC	(Ω) Rated	DC Current	Cat.
Inductance	Resistance	Max (mA)		Inductance	Resistance	Max (mA)	
47	1.22	340	LF-1530	$1\mu0$	0.09	920	LF-1510
68	1.47	305	LF-1532	1μ 5	0.23	830	LF-1512
100	1.80	275	LF-1534	2μ2	0.28	750	LF-1514
150	4.20	175	LF-1536	3μ3	0.34	670	LF-1516
220	5.10	155	LF-1538	4μ7	0.39	620	LF-1518
330	6.40	137	LF-1540	6µ8	0.48	550	LF-1520
				10	0.58	500	LF-1522
470	7.70	126	LF-1542	15	0.72	460	LF-1524
680	9.40	113	LF-1544	22	0.84	410	LF-1526
1000	14.00	100	LF-1546	33	1.03	370	LF-1528
7					Ωtv 1⊥ Ω	tv 25⊥ Ot	v 100⊥

All the above

FERRITE RF COIL PACK

Pack includes:

- Moulded coil former with PC Pins
- · Threaded Ferrite slug

• Metal screening can	
Specifications	
Former	Pin spacing 6.5mm
Height (less pins) 11mm	Diameter of former 3mm
Slug	
Material F16	Length 8mm
Can	
Material, drawn aluminium	
Din spesing 7 Emm	Hole in top of can
Pin spacing 7.5mm	for slug adjustment
	<u> </u>



l	Cat.	Qty 1+	Qty 25+	Qty 100+
	LF-1227	\$3.50	\$2.45	\$2.05

Mini Coil Pack

Set of 4 standard coils for AM section of a superheterodyne receiver with 455kHz. IF offset. Colour dot on top of ferrite slug indicates type.

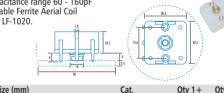
- · Red is the oscillator coil
- Yellow is the first 455kHz IF
- · White is the 2nd Black is the 3rd.
- See website for more information

ioi more imormation.		-1 1				
	Cat.	Qty 1+	Qty 25+	Qty 100+		
	LF-1050	\$3.75	\$2.60	\$2.15		

MINIATURE TUNING CAPACITOR

As used in most transistor radios and many kits that incorporate a radio.

- Size 20 x 20 x 10.5 high (mm).
- Supplied with 35(mm) dia. plastic knob & screw Capacitance range 60 160pF
- Suitable Ferrite Aerial Coil Cat. LF-1020.



7	Size (mm)	Cat.	Qty 1+	Qty 25+	Qty 100+
	20 x 20 x 10.5	RV-5728	\$2.75	\$1.90	\$1.65

WHAT, EXACTLY IS FERRITE?

Ferrite is a ceramic material with Iron Oxide - up to 50% then with oxides of manganese and zinc or nickel. The ceramic material is mixed with these substances, pressed or extruded into useful shapes and finally fired in a furnace to their final hard, brittle state.



From this there are two forms: Manganese - Zinc (Mn-Zn) ferrites which are the most common and are used for lower frequency work. They have higher permeability than the higher frequency type which have Nickel and Zinc Oxide components.

The products shown in this catalogue are Mn-Zn types. For more information check our website.

EMI Filters & Voltage Protection

EMI FILTERS

IEC EMI Power Line Filter - 6 Amp

These Industry standard design RF/EMI filters are designed to reduce line - to - ground (common mode) interference. They accept a standard IEC power line connector and are panel mounted. They meet (or exceed) international standard leakage requirements and are rated for mains voltages of 115 to 250V, 50, 60Hz.

• Safety and construction are in compliance with UL, CSA, VDE.

		DE 91
Specifications:		
Rated voltage	115/250VAC	(C) (M)
Power line freq	50/60Hz	அய
Rated current	6 amps	~ ~
Maximum leakage current	@ 115 VAC 60Hz 0.25mA	(N) (S)
Line to ground	@ 250VAC 50Hz 0.50mA	
Test voltage	Line to ground: 2250VDC, one minute	A _
	Line to line: 1450VDC, one minute	(\mathring{S}) (FI)
Typical insertion loss (dB) =	Line-to-ground in 50Ω system.	9 0
Current Freq (MHz)		
Rating 0.15 0.5 1	5 10 30	∑_ <u>†</u> — ₹
6A 10 20 25	42 45 50	\$\frac{1}{1} \qquad 8
	· · · · · · · · · · · · · · · · · · ·	,,,
7	Cat. Qty 1+ Qty	4+ Qty 10+

MS-4003

\$9.95

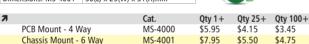
\$8.75

\$7.75

240V AC EMI Filter

Designed for mounting inside a chassis, these industry standard RF/EMI filters are pre-designed to reduce line-to-ground (common mode) interference. Rated for mains voltages of 125 or 240VAC 50 or 60Hz, they are very useful when mains cords are fixed to the outside chassis and an IEC320 inlet is not suitable.

Specifications:	
Rated voltage	250VAC, 50Hz
Rated current	10A
Leak current	0.8mA max
Insulation resis	100M ohm min
Attenuation	1 - 50MHz
Termination	PCB mounting pins (MS-4000)
ICIIIIIIauvii	& solder tags (MS-4001)
Dimensions: MS-4000	36(L) x 31(W) x 19(H)mm
Dimensions: MS-4001	50(L) x 25(W) x 31(H)mm

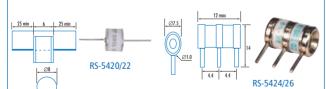


SURGE ARRESTORS

Gas Discharge Type Surge Arresters

Gas discharge arresters are ideal for quenching high voltage, fast rise-time interference transients. They are very high impedance (virtually open circuit) in the normal state with a typical capacitance of 1pF between electrodes. When a voltage spike appears, they are over and present a relatively low impedance in this condition effectively quenching the spike. They are suitable for protection of telecom lines and antenna circuits. They are not recommended to be fitted across mains circuits as the low source impedance of the mains could destroy these devices after the fault spike has cleared.

- Well-proven and reliable device.
- · Four models are offered



l								
l	DC Sp	ark Over	Axial	PCB Mount] r	MANUFAC	CTURERS:	
l	Vol	tage	2 Electrodes	3 Electrodes	CONTACT US FO			
l	90V +/	- 20%	Cat. RS-5420	Cat. RS-5424	TEIL	BULK P	RICES.	
l	230V +	-/- 15%	Cat. RS-5422	Cat. RS-5426				
l					PRICE			
l.								
ı	7			Cat.	Qty 1+	Qty 10+	Qty 25+	
ľ	90V	2 Elect	rodes	RS-5420	\$8.95	\$7.95	\$6.95	
ı	230V	2 Elect	rodes	RS-5422	\$8.95	\$7.95	\$6.95	
ľ	901/	3 Flect	rodes	RS-5424	\$8.95	\$7.95	\$6.95	

RS-5426

\$8.95

\$7.95

\$6.95

VOLTAGE PROTECTION

Metal Oxide Varistors (MOV)

Ideal protection against voltage spikes or transients. Most mains filters have MOVs. Helps to prevent damage to sensitive equipment such as microprocessors and digital electronics.

Resin dipped case

Prices per each.



Operating	Dia	Clamping	Peak	Max				
Voltage(AC)		Voltage(V)	Current(A)	Energy(J)	Cat.	Qty 1+	Qty 10+	Qty 25+
10	8	18	100	0.4	RN-3411	\$1.75	\$1.55	\$1.40
10	14	18	500	2.8	RN-3412	\$1.75	\$1.55	\$1.40
10	17	18	1000	6.6	RN-3413	\$1.75	\$1.55	\$1.40
275	10	710	2500	60	RN-3406	\$1.75	\$1.55	\$1.40
275	14	710	4500	115	RN-3400	\$1.75	\$1.55	\$1.40
275	20	710	6500	190	RN-3404	\$1.75	\$1.55	\$1.40
460	14	750	2500	125	RN-3415	\$1.75	\$1.55	\$1.40
460	17	750	4500	203	RN-3416	\$1.75	\$1.55	\$1.40
460	25	1240	6500	266	RN-3417	\$1.75	\$1.55	\$1.40

COMPONENT LEAD FORMING TOOL

Get the hole spacing for your resistors and diodes perfect every time. This handy forming tool provides uniform hole spacing from 10 to 38mm. Suitable for production assembly, education and training. The tool is double sided with one side for use with DO47 outline diodes (eg 1N914) and 1W Zener diodes; the other side being suitable for 1/4W resistors, DO41 outline diodes (eg

- An incredibly handy tool!
 Made in USA from engineering plastic.
 Dimensions: 138 (L)mm

7 Cat.	Qty 1 +	Qty 3+	Qty 6+
TH-1810	\$7.95	\$6.95	\$6.25

TRANSIENT VOLTAGE SUPPRESSORS (TVS)

- Excellent clamping voltage
- Low Zener impedance
- Fast response time Operating & storage temperature -55°C to 175°C







400W RANGE (DC) • Peak power: 400W • Steady state: 1W

Standoff Clamp Peak Pulse				Package				
Voltage(V)	Vbr	Voltage	Current(A)	Size	Cat.	Qty 1+	Qty 10+	Qty 25+
5.5	6.12	10.8	38	D0-41	ZR-1150	\$1.45	\$1.30	\$1.15
12.1	13.5	22.0	19	D0-41	ZR-1152	\$1.45	\$1.30	\$1.15
12.9	14.4	23.5	18	D0-41	ZR-1154	\$1.45	\$1.30	\$1.15

400W RANGE (AC) • Peak power: 400W • Steady state: 1W

Standoff		Clamp	Peak Pulse	Package				
Voltage(V)	Vbr	Voltage	Current(A)	Size	Cat.	Qty 1+	Qty 10+	Qty 25+
12.8	14.3	21.2	20	D0-41	ZR-1160	\$1.70	\$1.50	\$1.35
13.6	15.2	22.5	19	D0-41	ZR-1162	\$1.70	\$1.50	\$1.35
342	380	548	0.7	D0-41	ZR-1164	\$3.50	\$3.15	\$2.75

1500W RANGE (DC) • Peak power: 1500W • Steady state: 5W

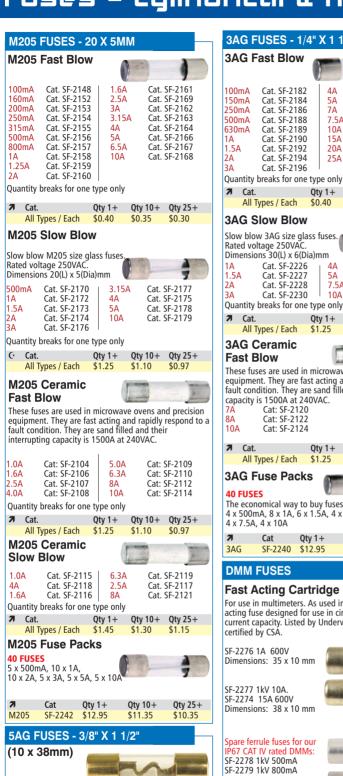
	Standoff		Clamp	Peak Pulse	Package				
	Voltage(V)	Vbr	Voltage	Current(A)	Size	Cat.	Qty 1+	Qty 10+	Qty 25+
	12.1	13.5	22	69.1	D0-201	ZR-1168	\$2.50	\$2.21	\$1.95
ı	12.9	14.4	23.5	64.7	D0-201	ZR-1170	\$2.50	\$2.21	\$1.95

1500W RANGE (AC) • Peak power: 1500W • Steady state: 5W

Standoff		Clamp	Peak Pulse	Package				
Voltage(V)	Vbr	Voltage	Current(A)	Size	Cat.	Qty 1+	Qty 10+	Qty 25+
13.6	15.2	22.5	67.6	D0-201	ZR-1175	\$3.50	\$3.15	\$2.75
30.8	34.2	49.9	30.5	D0-201	ZR-1177	\$3.50	\$3.15	\$2.75
342	380	548	2.8	D0-201	ZR-1180	\$4.50	\$3.95	\$3.60

230V

160mA 200mA 250mA 315mA 500mA 800mA 1.25A 2Δ 500mA 1.5A 3A C Cat. **Fast Blow** 1.6A 4.0A Slow Blow 1.6A 7 Cat. 40 FUSES M205





3AG FUSES - 1/4" X 1 1/4"

3AG Fast Blow



Quantity breaks for one type only

7 Cat. Qty 1+ Qty 10+ Qty 25+ All Types / Each \$0.40 \$0.35

3AG Slow Blow

Slow blow 3AG size glass fuses. Rated voltage 250VAC. Dimensions 30(L) x 6(Dia)mm Cat. SF-2226 Cat. SF-2232 Cat. SF-2233 Cat. SF-2227 5A Cat. SF-2228 Cat. SF-2230 10A Cat. SF-2234

Cat. Qty 1+ Qty 10+ Qty 25+ All Types / Each \$1.25 \$1.10 \$0.97

3AG Ceramic Fast Blow

These fuses are used in microwave ovens and precision equipment. They are fast acting and rapidly respond to a fault condition. They are sand filled and their interrupting capacity is 1500A at 240VAC.

7A	Cat: SF-2120	
8A	Cat: SF-2122	Quantity breaks
10A	Cat: SF-2124	for one type onl

Qty 1+ Qty 10+ Qty 25+ All Types / Each \$1.10 \$1.25 \$0.97

3AG Fuse Packs

The economical way to buy fuses. Consists of: 4 x 500mA, 8 x 1A, 6 x 1.5A, 4 x 2A, 6 x 3A, 4 x 5A, 4 x 7.5A, 4 x 10A

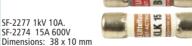
7	Cat	Qty 1+	Qty 10+	Qty 25+
3AG	SF-2240	\$12.95	\$11.35	\$10.35

DMM FUSES

Fast Acting Cartridge Fuses

For use in multimeters. As used in multimeters, Fast acting fuse designed for use in circuits with high AC fault current capacity. Listed by Underwriters Laboratories and certified by CSA.

SF-2276 1A 600V Dimensions: 35 x 10 mm



Spare ferrule fuses for our IP67 CAT IV rated DMMs SF-2278 1kV 500mA SF-2279 1kV 800mA Dimensions: 32 x 6.35mm



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	SF-2276	\$8.95	\$7.95	\$6.95
	SF-2279	\$9.95	\$8.75	\$7.75
	SF-2278	\$9.95	\$8.75	\$7.75
	SF-2274	\$17.95	\$15.95	\$14.35
	SF-2277	\$14.95	\$13.35	\$11.70

FUSE DIMENSIONS M205 (20 x 5mm) 3AG (30 x 6mm) 5AG (38 x 10mm)

Freecall order hotline: 1800 022 888

Fuse Wire

Includes 8 amp for lights and 15 amp for power.



Cat. Qty 1+ Otv 10+ Qty 25+ SZ-2005 \$2.95 \$2.60 \$2.30

PCB MOUNT FUSE HOLDERS

Fuse Clips



Size	Pkt	Cat	Qty 1+	Qty 10+	Qty 25+
M205	8	SZ-2018	\$2.75	\$2.45	\$2.15
M205	100	SZ-2019	\$18.95	\$16.95	\$14.95
3AG	8	SZ-2022	\$2.75	\$2.45	\$2.15
3AG	100	SZ-2023	\$18.95	\$16.95	\$14.95

M205 PCB Mount **Fuse Holder**

PCB mounting M205 fuse holder. Supplied with screw cover to hold fuse in place.
• Max Fuse: 6.3A @ 250VAC

Mounting	Cat	Qty 1+	Qty 10+	Qty 25+
Vertical	SZ-2038	\$3.50	\$3.15	\$2.75
Horizontal	SZ-2039	\$3.50	\$3.15	\$2.75

INLINE FUSE HOLDERS

3AG

Plastic in-line type.

 As used on car radios, CB, etc.

• Takes 3AG fuses. • Low volt DC only • 10A max.

SZ-2015 \$1.75 \$1.55

3AG Moistureproof Fuseholder

Two rubber parts push together over the fuse to keep moisture out. Ideal for boats, cars or anywhere moisture

is present.

- Cable needs to be soldered on, crimped to end parts.
- Could be made virtually waterproof with some silicone sealant.
- · Low volt DC only / 10A max.

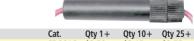
Note: Not suitable for 6mm fuses

Cat. Qty 1+ Qty 10+ Qty 25+ SZ-2014 \$2.50 \$2.21 \$1.95

3AG 20A High Current

If you want to fuse something higher than 5 amp you will need this holder.

- Super strong plastic holderSupplied with cable loop.
- Simply cut and join to existing cables
 Low volt DC only



SZ-2016 \$3.50 5AG 60 Amp

For high-powered car sound systems.

Accepts 5AG fuse.
 80(L) x 19(D)mm.

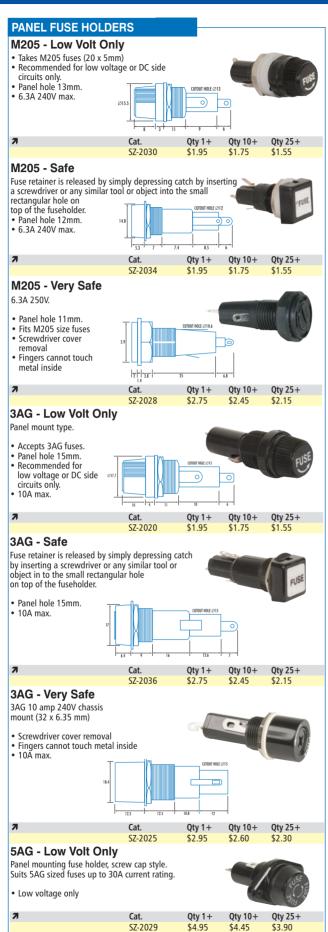
Supplied with a small length of cable,

simply cut and join in line.



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Fuse – Holders & Blocks

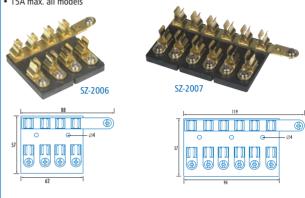


3AG FUSE BLOCKS & PANELS

Fuse Gang Blocks

All have natural brass contacts riveted to a fibreglass filled nylon board. Both can be easily split into modules of two. Ideal for automotive, aircraft, marine or other low

- 4 & 6 Way with power/ earth bus.
- Accepts 3AG type fuses
- Plated screw terminals
- Both can be safely screwed to a metal surface (low voltage only)
- 15A max. all models



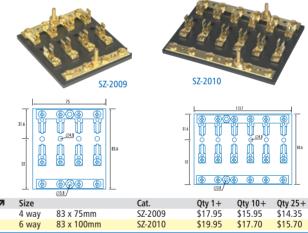
7	Size		Cat.	Qty 1+	Qty 10+	Qty 25+
	4 way	57 x 60mm	SZ-2006	\$9.95	\$8.75	\$7.75
	6 way	57 x 90mm	SZ-2007	\$12.95	\$11.35	\$10.35

Double BusBar for 3AG Fuses

One bus connected to one side of fuse clip. This could be, say, to \pm 12V. The other side of the clip is riveted to the board and has a brass power screw termination. You could wire to your application and return to the other busbar for say, earth. We recommend that this board is stood off from a metal bulkhead for extra electrical safety.

Accepts 3AG fuses.





Pre Wired Switch/Fuse Panels

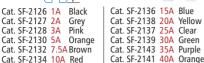
Attractive anodised plate with screen printed graphics. Each circuit is pre-wired to greatly assist installation. Rocker switches 10A DC 12V rated. A 12V Pilot globe illuminates switch to indicate "on". Fuse holder is safety type, 3AG. Supplied with each panel is a set of 23 stickers naming typical circuits (mainly for marine applications). Mounting screws and a couple of 5A, 3AG fuses are also included.



BLADE FUSES & HOLDERS

Standard Blade Fuses







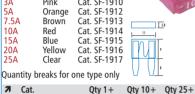
Quantity breaks for one type only

7	Cat.	Qty 1+	Qty 10+	Qty 25+
	All Types / Each	\$0.85	\$0.75	\$0.65

Mini Blade Fuses

They look similar to the standard car blade fuses, except they are smaller. Used in new Holden Commodores, Falcons and more.

ZA	Grey	Cat. Sr-1909
3A	Pink	Cat. SF-1910
5A	Orange	Cat. SF-1912
7.5A	Brown	Cat. SF-1913
10A	Red	Cat. SF-1914
15A	Blue	Cat. SF-1915
20A	Yellow	Cat. SF-1916
25A	Clear	Cat. SF-1917



7	Cat.	Qty 1+	Qty 10+
	All Types / Each	\$0.95	\$0.85

Automotive Fuse Pack

This kit contains around 120 standard size automotive fuses housed in a 6 compartment storage box.

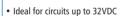
20 x 5A, 10A, 15A, 20A, 25A & 30A fuses are included



7	Cat.	Qty 1+	Qty 10+	Qty 25+
	SF-2142	\$23.95	\$21.35	\$18.95

Blade Fuses Failure Lamp

Not your ordinary blade fuse, these have an integrated lamp which illuminates the moment the fuse blows. This makes finding that blown fuse a cinch, especially when the fuse is in a hard to get location, like under the car dashboard. They don't cost much either, so they are a very



MINI BLADE FUSES

worthwhile investment

• 19(H) x 10.8(L) x 4(W)mm approx.

7	Colour	Cat.	Qty 1+	Qty 10+	Qty 25+
3A	Pink	SF-5070	\$1.30	\$1.15	\$1.01
5A	Orange	SF-5072	\$1.30	\$1.15	\$1.01
7.5A	Brown	SF-5074	\$1.30	\$1.15	\$1.01
10A	Red	SF-5076	\$1.30	\$1.15	\$1.01
15A	Blue	SF-5078	\$1.30	\$1.15	\$1.01
20A	Yellow	SF-5080	\$1.30	\$1.15	\$1.01
25A	Clear	SF-5082	\$1.30	\$1.15	\$1.01
30A	Green	SF-5084	\$1.30	\$1.15	\$1.01
5-30A	Pkt 6	SF-5085	\$6.95	\$6.25	\$5.50

Micro Blade Fuses 10pk

Micro-blade fuses to suit newer model cars.

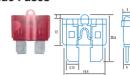
Contains one each of 5, 7.5, 25, 30A and two each of 10, 15, 20A.



Standard Blade Fuses

Measures





					14.4		
7	Colour	Cat.	Qty 1+	Qty	/ 10+	Qty 25+	
3A	Pink	SF-5020	\$1.20	\$1.	.05	\$0.95	
5A	Orange	SF-5022	\$1.20	\$1	.05	\$0.95	
7.5A	Brown	SF-5024	\$1.20	\$1.	.05	\$0.95	
10A	Red	SF-5026	\$1.20	\$1	.05	\$0.95	
15A	Blue	SF-5028	\$1.20	\$1.	.05	\$0.95	
20A	Yellow	SF-5030	\$1.20	\$1.	.05	\$0.95	
25A	Clear	SF-5032	\$1.20	\$1.	.05	\$0.95	
30A	Green	SF-5034	\$1.20	\$1	.05	\$0.95	
5-30A	Pkt 6	SF-5035	\$5.95	\$5	.25	\$4.75	

Wire Tapped Blade Fuses

Standard size blade fuses with a 200mm long flying lead so you can easily tap off the right circuit to install accessories or diagnose problems. Each fuse also has an indicator lamp so you can quickly see if it has blown or not and the lead terminates to a female bullet crimp connector.

7	Cat.	Qty 1+	Qty 10+	Qty 25+
Red 10A	SF-5110	\$6.95	\$6.25	\$5.50
Red 15A	SF-5112	\$6.95	\$6.25	\$5.50
Red 20A	SF-5114	\$6.95	\$6.25	\$5.50

Wire Tapped Standard Mini Blade Fuses

Mini size blade fuses with a 200mm long flying lead so you can easily tap off the right circuit to install accessories or diagnose problems.

Each fuse also has an indicator lamp so you can guickly see if it has blown or not and the lead terminates to a female bullet crimp connector.

7	Cat.	Qty 1+	Qty 10+	Qty 25+
Red 10A	SF-5120	\$6.95	\$6.25	\$5.50
Red 15A	SF-5122	\$6.95	\$6.25	\$5.50
Dod 20A	SF_512/	\$6.05	\$6.25	¢5 50

Maxi-Blade Fuses



Suits our range of compression

· Gold-plated for minimum resistance & maximum current transfer.

• Fuses supplied in packs of two.

Cat. SF-1942 100A Cat. SF-1950 12.6

Quantity breaks for one type only

7 Cat. Qty 1+ Qty 10+ All Types / Pkt 2 \$8.95 \$7.95 \$6.95

30A Blade Fuse Holder

Accepts standard car type blade fuses. Supplied with heavy duty cable in a loop. Simply cut and join to existing cable.

• Low volt DC only



	,			
7	Cat.	Qty 1+	Qty 10+	Qty 25+
	SZ-2040	\$2.95	\$2.60	\$2.30

4G Platinum Inline Maxi Blade Fuseholder

These Inline fuse holders accept our range of gold-plated maxi fuses and uses compression fitting gold-plated cable termination. Put this next to your battery to protect your hotline from a short-circuit, or runaway amplifier.

Suits 4G cable

AMP-KING

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	\$7-2082	\$14.95	\$13.35	\$11.70

Panel Mount Blade Fuse Holder

Panel mount for auto or marine applications. Takes standard blade fuses, rated for 12VDC 30A max.



7	Cat.	Qty 1+	Qty 10+	Qty 25+
	SZ-2046	\$3.95	\$3.45	\$3.15

30A Blade Fuse Holder

WITH FAILURE LAMP - WATER RESISTANT These fuse holders accept ordinary blade fuses and have an integrated lamp that will light up when the fuse blows, making it easy to find the offending fuse. This is especially useful if the fuse is in a difficult or crowded location. They are supplied

with 11mm leads and available to suit standard blade and mini-blade fuses.

Ideal for circuits up to 32VDC

Туре	Cat.	Qty 1+	Qty 10+	Qty 25+
Standard	SZ-2042	\$4.95	\$4.45	\$3.90
Mini Blade	SZ-2043	\$4.95	\$4.45	\$3.90

30A Blade - Stackable

These fuseholders accept standard blade fuses. They slide together if more than one is required, so you could have a bank of these mounted in your car. They have a cap over the front which makes them look very neat and tidy.

- Handle 30 amps Supplied with a wire loop, which can be cut to suit • 41(L) x 24(H) x 10(W) mm
- Low volt DC only

Qty 1+ Qty 10+ Qty 25+ SZ-2045 each \$3.95 \$3.45 \$3.15

Automotive Fuse Box - 6 Blades

Fits six standard car blade fuses. Fibreglass reinforced nylon base with



32VDC max

 45A/block max 6.3mm OC terminals

Measures 112(L) x 46(W) x 40(H)mm

Qty 1+ Qty 10+ Qty 25+ Cat. SZ-2002 \$12.95 \$11.35 \$10.35

Fuses - Holders, High Current & Thermal

AUTOMOTIVE FUSE HOLDERS (CONTINUED)

10 Way Blade Fuse Block with LED Indicators

Perfect for automotive or marine applications. Features a common supply rail and includes a removable protective cover and LED indicators for each fuse.

- 10 way

Note: Fuses not included



Waterproof Fuse Block with LED Indicators

This 10-way waterproof fuse block is perfect for a marine application, keeping fuse and wiring connections well protected from corrosion. Each fuse socket has an LED indicator to give you quick indication of blown fuses, and there are also a number of slots to fit spare fuses. Designed for panel mount applications



• Dimensions: 125(W) x 89(H) x 47(D)mm Note: Fuses not included (without cover)

7	Cat.	Qty 1+	Qty 10+	Qty 25+
	SZ-2001	\$24.95	\$22.35	\$19.70

ULTRA HIGH CURRENT FUSES

Littelfuse® patented technology designed for high current protection, found OEM on Ford, GM and Chrysler vehicles. Slo-Blo® feature eliminates nuisance blowing during temporary, short duration overloads. Commonly used for battery and alternator connections and other heavy gauge cables requiring ultra high current protection. SF-1982 and SF-1984 are slow blow fuses; SF-1986 is a short-circuit protection device.



BOLT-DOWN FUSE 500A

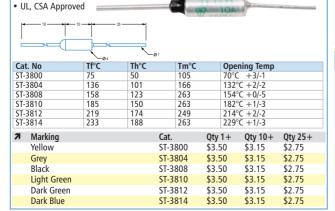
(Short Circuit Protector) Cat SF-1986

			_	
7	Cat.	Qty 1+	Qty 10+	Qty 25+
Fuse Holder	SF-1980	\$19.95	\$17.70	\$15.70
Bolt Down Fuse - 125A	SF-1982	\$9.95	\$8.75	\$7.75
Bolt Down Fuse - 250A	SF-1984	\$9.95	\$8.75	\$7.75
Bolt Down Fuse - 500A	SF-1986	\$9.95	\$8.75	\$7.75

THERMAL PROTECTION

Thermal Fuses

These devices go open circuit permanently when they reach their rated temperature. They are used extensively in 240V mains rated appliances including, heaters, fan heaters, curlers, hair dryers, toasters, etc.



POLYSWITCHES

PTC Fuses - Circuit Protection

Polyswitch protectors are based on conductive polymers and act like resettable solid state circuit breakers. When the operating current of the protector is exceeded the interior of the device partially melts, which increases the volume increasing the resistance drastically. This in turn reduces the current. The device stays in this state while the current is maintained because its temperature is elevated. Once the current is

removed, the device re-establishes itself almost immediately, so that the low resistance value is restored.

Voltage ratings RN3460/62 - 60V; the rest are 50V.

		' '	PRILE	2.1	
Cat.	Industry	Trip			Trip Current
	Part No	Watts 4Ω	6Ω	8Ω	Amps
RN-3460	RXE075	5.1	7.7	10.2	1.50
RN-3462	RXE090	7.3	10.9	14.6	1.8
RN-3464	RXE110	10.9	16.3	21.8	2.2
RN-3466	RXE160	23.0	34.6	46.1	3.2
RN-3468	RXE185	31.4	47.0	62.7	3.7
RN-3470	RXE250	56.3	84.4	112.5	5.0
Industry No.	0.	Cat	Qty	1+ Qt	y 10+ Qty 25+

7	Industry No.	Cat	Qty 1+	Qty 10+	Qty 25+
	RXE075	RN-3460	\$2.95	\$2.60	\$2.30
	RXE090	RN-3462	\$3.25	\$2.90	\$2.60
	RXE110	RN-3464	\$3.50	\$3.15	\$2.75
	RXE160	RN-3466	\$3.95	\$3.45	\$3.15
	RXE185	RN-3468	\$3.95	\$3.45	\$3.15
	RXE250	RN-3470	\$4.50	\$3.95	\$3.60

THERMOSTAT SWITCHES

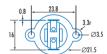
AUTOMATIC RESETTING BI-METALLIC DISC, SNAP ACTING This phenolic-housed unit attaches to any metal surface.

Normally closed or normally open available

Specifications:		
Operating tolerance	+/- 5°C (32VDC),	
	+/- 8°C(125VAC),	
	+/- 10°C (250VAC)	
Reset differential	10°C - 50°C	30.3
Contact endurance	32VDC - 100mA - 50,000 cycles	± 0.5
Cycles	125VAC - 10A - 100,000 cycles	21.2
Cycles	250VAC - 6A - 30,000 cycles	
Interrupt capacity	125VAC x 60A - 5 cycles	T.
Overshoot temperature	200°C/5 minutes	10 0
Dielectric strength	1500VAC 1 minute	
Reset type	Auto Reset	6.3

NORMALLY CLOSED

When the surface meets or exceeds a certain temperature, the SPST bi-metallic element goes open circuit.



- The unit resets automatically when temperature falls below specified limit
- · Ideal for any electrical item that needs thermal protection.

7	Opening Temp	Reclosing Temp				
	(°C)	(approx) (°C)	Cat.	Qty 1+	Qty 10+	Qty 25+
	60	40	ST-3821	\$5.75	\$4.95	\$4.60
	70	58	ST-3823	\$5.75	\$4.95	\$4.60
	90	75	ST-3825	\$5.75	\$4.95	\$4.60
	100	85	ST-3826	\$5.75	\$4.95	\$4.60

NORMALLY OPEN

These thermostat switches have normally open contacts. They operate once the temperature reaches a specified limit and automatically reset to their original normally open state once the temperature drops below its rated temperature. These are suitable for power amplifier applications and other temperature sensitive devices where a cooling fan needs to be integrated to cool the device down. Mounting holes are provided, ideal for attachment to a heatsink or any metallic surface.

7	Thermostat (°C)	Cat.	Qty 1+	Qty 10+	Qty 25+	
	50	ST-3831	\$5.75	\$4.95	\$4.60	
	70	ST-3833	\$5.75	\$4.95	\$4.60	
	100	ST-3836	\$5.75	\$4.95	\$4.60	

CIRCUIT BREAKERS

Chassis Mount Auto Circuit Breakers

Single pole thermal circuit breaker. Auto reset

•12 and 24VDC in current ratings from 20 - 50A.



7 Amp	Approval	Cat.	Qty 1+	Qty 10+	Qty 25+
20A	12VDC	SF-4100	\$11.95	\$10.70	\$9.50
30A	12VDC	SF-4102	\$11.95	\$10.70	\$9.50
40A	12VDC	SF-4104	\$11.95	\$10.70	\$9.50
50A	12VDC	SF-4106	\$11.95	\$10.70	\$9.50
20A	24VDC	SF-4108	\$11.95	\$10.70	\$9.50

Panel Mount Thermal Circuit Breakers (CBE)

IFC 934 TYPF "R/TO"

These attractive looking units feature a black 19mm square facade with a centrally mounted bright red 'trip' button.

- When tripped, the red button extends
- To reset simply push button back in (once fault has been cleared)
- Slow response time ideal for inductive/reactive loads





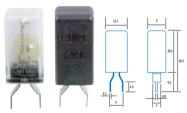
			•			
7	Rating (AAC)	Resistance (Ω)	Cat.	Qty 1+	Qty 10+	Qty 25+
	3	0.16	SF-2293	\$8.95	\$7.95	\$6.95
	5	0.12	SF-2295	\$8.95	\$7.95	\$6.95
	7	0.075	SF-2297	\$8.95	\$7.95	\$6.95
	10	0.015	SF-2300	\$8.95	\$7.95	\$6.95
	15	0.008	SF-2315	\$8.95	\$7.95	\$6.95

PCB Mount Thermal Circuit Breakers (SPST)

Miniature auto-resetting thermal type units that solder directly into a PCB.

- Ideal for protecting power supplies, amplifier output transistors, appliances etc.
 Slow response time is ideal when capricious tripping would be a nuisance.
- Slow response time is ideal when capricious tripping would be a like of Judicious selection of breaker rating will ensure protection without

Specifications	
Calibration	100% rated; will not trip. (all at 25°C) 101-170% increasing likelihood of trip / 175-199% trip within 1 hour. 200% within 1 minute / 200% + from 1 minute to seconds.
Input	12VDC, 125VAC
Dielectric strength	1500VAC 1 Minute
Contact endurance	>1000 cycles, @ 150% of contact rating.

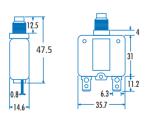


7	Rating (A)	Resistance (Ω)	Cat.	Qty 1+	Qty 10+	Qty 25+	
	1.5	0.12	SF-2281	\$6.95	\$6.25	\$5.50	
	3	0.075	SF-2283	\$6.95	\$6.25	\$5.50	
	4	0.050	SF-2284	\$6.95	\$6.25	\$5.50	
	5	0.050	SF-2285	\$6.95	\$6.25	\$5.50	

Electrical Type Circuit Breaker

These circuit breakers are rated at 250VAC.

- Maximum voltage 250VAC or 50VDC
 Will hold 100% of rated current indefinitely at 25°C
- Will trip within one hour at 125% of load at 25°C
 Will trip within 4 seconds at 150% of rated load
- · Mounting hole diameter 12mm



7 Amp	Approval	Cat.	Qty 1+	Qty 10+	Qty 25+
Millip				Qty IU⊤	QLY ZJT
3	CS8389N	SF-2252	\$8.85	\$7.75	\$6.95
5	CS8389N	SF-2254	\$8.85	\$7.75	\$6.95
10	CS8389N	SF-2258	\$8.85	\$7.75	\$6.95
15	CS8389N	SF-2259	\$8.85	\$7.75	\$6.95
20	CS8389N	SF-2260	\$8.85	\$7.75	\$6.95
25	CS8389N	SF-2261	\$8.85	\$7.75	\$6.95

High Current DC Circuit Breakers

Moulded in black electrical grade bakelite, these rugged and reliable devices allow you to simply reset rather than find another expensive fuse. They offer lower voltage drop than a fuse and can be used as an occasional circuit isolation switch. Two popular current ratings. Both units have the same physical dimensions. Ideal for car sound installations. Operating voltage is 12 to 14VDC. Each device will trip within a few milliseconds under short circuit conditions and feature protective rubber caps, test button and gold plated 5mm dia, terminals.

70A 12-14VDC

Will trip within 1 minute at 90A load. Will trip within a few milliseconds under short circuit conditions. Supplied with 5mm dia gold plated terminals with captive shakeproof washer and provision for up to 1/4" mounting bolts. Protective rubber caps for terminals. Test button on top of unit enables circuit breaker to be used as switch circuit restored with simple lever action.

100A 12-14VDCWill trip at 110A or immediately under short circuit

7	Rating (A)	Resistance (Ω)	Cat.	Qty 1+	Qty 10+	Qty 25+
	70	0.12	SF-2265	\$26.95	\$23.95	\$21.35
	100	0.075	SF-2266	\$26.95	\$23.95	\$21.35

DIN RAIL CIRCUIT BREAKERS

DIN Rail Mounting AC Circuit Breakers

DIN rail mounted circuit breakers for domestic and commercial switchboards, fuse boxes, distribution hoards etc

- Standard DIN profile.Electrical safety authority approved.
- All 240VAC

Single Pole 10A Cat SF-4150 Single Pole 16A Cat SF-4151 Single Pole 20A Cat SF-4152 Single Pole 32A Cat SF-4153



7		Cat.	Qty 1+	Qty 4+	Qty 10+
10A	Single Pole	SF-4150	\$6.95	\$6.25	\$5.50
16A	Single Pole	SF-4151	\$6.95	\$6.25	\$5.50
20A	Single Pole	SF-4152	\$6.95	\$6.25	\$5.50
32A	Single Pole	SF-4153	\$6.95	\$6.25	\$5.50

DIN Rail Mount 2 Pole DC Circuit Breakers

DC circuit breakers, ideal for solar installations, marine, RV etc. Rated for 500VDC.

- Standard DIN profile.
- · Electrical safety authority approved.

2 Pole 16A DC Cat SF-4155 2 Pole 20A DC Cat SF-4156



7			Cat.	Qty 1+	Qty 4+	Qty 10+
	16A	2 Pole	SF-4155	\$24.95	\$22.35	\$19.70
	20A	2 Pole	SF-4156	\$24.95	\$22.35	\$19.70

4 Way Lockable IP66 Circuit Breaker Enclosure

Designed to take the range of DIN rail circuit breakers. Standard 4-pole ABS enclosure, spring loaded clear front cover with padlock tabs, top, bottom and rear cable entry, DIN rail included, sealed to IP66. Suitable for electrical installations or solar applications.

• Dimensions: 96(W) x 195(H) x 98(D)mm



7	Cat.	Qty 1+	Qty 4+	Qty 10+
4 way	SF-4158	\$34.95	\$31.45	\$27.90

TRANSFORMERS

SCANAR

9V, 1.35VA, 150mA Centre Tapped

TYPE 2840

Specifications						
Туре	2840	Temp rise above ambient at rated power	60°C			
Secondary winding (s)	Centre tapped	Regulation	10%			
Primary voltage	240VAC	Weight	120g			
Total VA rating	1.35VA	Primary connection	Fly leads			
Secondary voltages	4.5V(CT), 9V	Secondary connection	Fly leads			
Secondary current (max)	150mA	Conforms to AS/NZ 3108 & AS/NZ 61558.2.6	CS06918V			
Magnetising current	30mA	Dimensions	A48 D35 L38 W16 H32			

24V, 3.6VA, 150mA Centre Tapped

TYPE 2854

Specifications				
Туре	2854	Temp rise above ambient at rated power	65°C	
Secondary winding (s)	Centre tapped	Regulation	10%	
Primary voltage	240VAC	Weight	230g	
Total VA rating	3.6VA	Primary connection	Fly leads	
Secondary voltages	12V(CT), 24V	Secondary connection Conforms to AS/NZ 3108	Fly leads	
Secondary current (max)	150mA	Conforms to AS/NZ 3108 & AS/NZ 61558.2.6	CS8851N	
Magnetising current	40mA	Dimensions	A54 D41 L43 W22 H36	

12.6V CT, 1.9VA, 150mA Centre Tapped

TYPE 2851

Specifications					
Туре	2851	Temp rise above ambient at rated power	40°C		
Secondary winding (s)	Centre tapped	Regulation	8%		
Primary voltage	240VAC	Weight	124g		
Total VA rating	1.9VA	Primary connection	Fly leads		
Secondary voltages	6.3V(CT), 12.6V	Secondary connection	Fly leads		
Secondary current (max)	150mA	Conforms to AS/NZ 3108 & AS/NZ 61558.2.6	CS06918V		
Magnetising current	15mA	Dimensions	A46 D32 L37 W16 H32		

30V CT, 4.5VA, 150mA Centre Tapped

TYPE 2855

Specifications					
Туре	2855	Temp rise above ambient at rated power	40°C		
Secondary winding (s)	Centre tapped	Regulation	8%		
Primary voltage	240VAC	Weight	232g		
Total VA rating	4.5VA	Primary connection	Fly leads		
Secondary voltages	15V(CT), 30V	Secondary connection	Fly leads		
Secondary current (max)	150mA	Conforms to AS/NZ 3108 & AS/NZ 61558.2.6	CS06918V		
Magnetising current	40mA	Dimensions	A54 D47 L44 W29 H35		

12.6V CT, 7VA, 500mA Centre Tapped

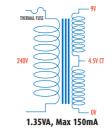
TYPE 2853

Specifications					
Туре	2853	Temp rise above ambient at rated power	40°C		
Secondary winding (s)	Centre tapped	Regulation	7%		
Primary voltage	240VAC	Weight	310g		
Total VA rating	7VA	Primary connection	Fly leads		
Secondary voltages	6.3V(CT), 12.6V	Secondary connection	Fly leads		
Secondary current (max)	500mA	Conforms to AS/NZ 3108 & AS/NZ 61558.2.6	CS8851N		
Magnetising current	40mA	Dimensions	A60 D38 L50 W20 H43		

6.3 - 15V, 15VA, 1A Multi-tapped

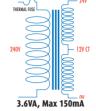
TYPE 2155

Specifications						
Туре	2155	Temp rise above ambient at rated power	45°C			
Secondary winding (s)	Multi tapped	Regulation	10%			
Primary voltage	240VAC	Weight	478g			
Total VA rating	15VA	Primary connection	Fly leads			
Secondary voltages	6.3V(CT), 7.5V(CT), 8.5V, 9.5V, 12.6V, 15V	Secondary connection	Solder lugs			
Secondary current (max)	1A	Conforms to AS/NZ 3108 & AS/NZ 61558.2.6	CS06918V			
Magnetising current	30mA	Dimensions	A72 D51 L60 W28 H51			



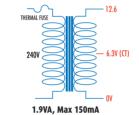


Cat.	Qty 1+	Qty 2+	Qty 4+
MM-2017	\$7.95	\$6.95	\$6.25



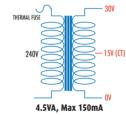


7	Cat.	Qty 1+	Qty 2+	Qty 4+
	MM-2018	\$8.95	\$7.95	\$6.95



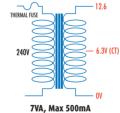


	,						
7			Cat.	Qty 1+	Qty 2+	Qty 4+	
			MM-2006	\$7.95	\$6.95	\$6.25	



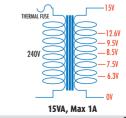


7	Cat.	Qty 1+	Qty 2+	Qty 4+
	MM-2007	\$8.95	\$7.95	\$6.95





	/va, max suuma					
7		Cat.	Qty 1+	Qty 2+	Qty 4+	
		MM-2013	\$9.95	\$8.75	\$7.75	





15VA, Max 1A					
	IOVA, MIDA IA	4			
7		Cat.	Qty 1+	Qty 2+	Qty 4+
		MM-2002	\$11.95	\$10.70	\$9.50

Transformers - Mains

15 - 30V, 30VA, 1A Multi-tapped

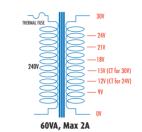
Specifications					
Туре	6672	Temp rise above ambient at rated power	60°C		
Secondary winding (s)	Multi tapped	Regulation	8%		
Primary voltage	240VAC	Weight	995g		
Total VA rating	30VA	Primary connection	Fly leads		
Secondary voltages	15V(CT), 17.5V, 20V, 24V, 27.5V, 30V	Secondary connection	Solder lugs		
Secondary current (max)	1A	Conforms to AS/NZ 3108 & AS/NZ 61558.2.6	CS06918V		
Magnetising current	40mA	Dimensions	A85 D63 L70 W40 H59		



9 - 30V, 60VA, 2A Multi-tapped

TYPE 2165

Specifications			
Туре	2165	Temp rise above ambient at rated power	60°C
Secondary winding (s)	Multi tapped	Regulation	8%
Primary voltage	240VAC	Weight	1015g
Total VA rating	60VA	Primary connection	Fly leads
Secondary voltages	9V(CT), 12V(CT), 15V(CT), 18V, 21V, 24V, 30V	Secondary connection	Solder lugs
Secondary current (max)	2A	Conforms to AS/NZ 3108 & AS/NZ 61558.2.6	CS06918V
Magnetising current	60mA	Dimensions	A85 D65 L70 W40 H59





NOTE: Made from special high grade silicon steel for compact dimensions

\$18.95

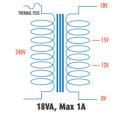
Qty 1+ Qty 2+ Qty 4+ MM-2005 \$27.95 \$24.95

12V - 18V, 18VA, 1A Multi-tapped

TYPE 2154

ELECTROMECHANICAL

6 161 11				
Specifications				
Туре	2154	Temp rise above ambient at rated power	60°C	
Secondary winding (s)	Multi tapped	Regulation	10%	
Primary voltage	240VAC	Weight	650g	
Total VA rating	18VA	Primary connection	Fly leads	
Secondary voltages	12V, 15V, 18V	Secondary connection	Solder lugs	
Secondary current (max)	1A	Conforms to AS/NZ 3108 & AS/NZ 61558.2.6	CS8851N	
Magnetising current	40mA	Dimensions	A71 D58 L60	

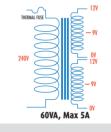




Qty 1+ Qty 2+ Qty 4+ \$11.95 \$10.70 \$9.50 Cat. MM-2011

9V - 24V, 60VA, 5A Multi-tapped Dual **TYPE 2167L**

Specifications				
Туре	2167L	Temp rise above ambient at rated power	65°C	
Secondary winding (s)	Multi-tapped dual	Regulation	10%	
Primary voltage	240VAC	Weight	1500g	
Total VA rating	60VA	Primary connection	Fly leads	
Secondary voltages	9V, 12V (x2)	Secondary connection	Solder lugs	
Secondary current (max)	2.5A (x2)	Conforms to AS/NZ 3108 & AS/NZ 61558.2.6	CS06918V	
Magnetising current	65mA	Dimensions	A83 D79 L69 W53 H60	



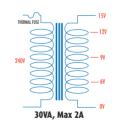


Cat. MM-2014 **Qty 2**+ \$24.95 \$27.95 \$22.35

6 - 15V, 30VA, 2A Multi-tapped

TYPE 2156

Specifications			
Туре	2156	Temp rise above ambient at rated power	60°C
Secondary winding (s)	Multi-tapped	Regulation	10%
Primary voltage	240VAC	Weight	1000g
Total VA rating	30VA	Primary connection	Fly leads
Secondary voltages	6V(CT), 9V, 12V, 15V	Secondary connection	Solder lugs
Secondary current (max)	2A	Conforms to AS/NZ 3108 & AS/NZ 61558.2.6	CS06918V
Magnetising current	60mA	Dimensions	A85 D60 L70 W40 H59





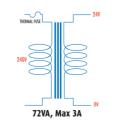
Cat. MM-2004 Qty 1+ Qty 2+ Qty 4+ \$18.95 \$16.95 \$14.95

24V, 72VA, 3A Single Winding

TYPE 2158

Specifications				
Туре	2158	Temp rise above ambient at rated power	65°C	
Secondary winding (s)	Single	Regulation	10%	
Primary voltage	240VAC	Weight	1600g	
Total VA rating	72VA	Primary connection	Fly leads	
Secondary voltages	24V	Secondary connection	Solder lugs	
Secondary current (max)	3A	Conforms to AS/NZ 3108 & AS/NZ 61558.2.6	CS06918V	
Magnetising current	60mA	Dimensions	A83 D82 L69 W53 H60	

Freecall order hotline: 1800 022 888



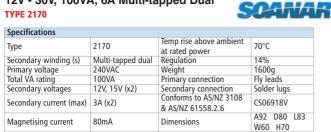


Qty 1+ \$27.95 **Qty 2+** \$24.95 Cat. MM-2012

Transformers - Mains

12V - 30V, 100VA, 6A Multi-tapped Dual

TYPE 2170



37.5 - 0 - 37.5V, 175VA, 2.5A **Centre Tapped 175VA**

This transformer is used in many amplifier applications.

Specifications				
Specifications		Transacion abassacione		
Type	436	Temp rise above ambient	_	
Type	450	at rated power		
C	Centre tapped,	Dl-ti		
Secondary winding (s)	plus dual	Regulation	-	
Primary voltage	240VAC	Weight	3040q	
Total VA rating	175VA	Primary connection	200mm Fly leads	
Secondary voltages	35V(CT), 70V	Secondary connection	200mm Fly leads	
Secondary current (max)	2 5 4			
Secondary current (max)	2.5A			
		F	A78 D90 L96	
Magnetising current		Dimensions	W51 H80	

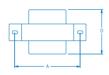
47 - 0 - 47V, 300VA, 3A Centre Tapped, 2 x 15V, 500mA

This transformer is used in many amplifier applications and has two 15V outputs to power pre-amplifier circuits.

Specifications			
Туре	4363	Temp rise above ambient at rated power	-
Secondary winding (s)	Centre tapped, plus dual	Regulation	-
Primary voltage	240VAC	Weight	-
Total VA rating	300VA	Primary connection	Fly leads
Secondary voltages	47V(CT), 94V plus, 15V (x2)	Secondary connection	Fly leads
Secondary current (max)	3A plus 500mA x 2		-
Magnetising current		Dimensions	A95 D95 L115 W51 H95

DIMENSIONS

Cat.	Α	D	L	W	Н	Cat.	Α	D	L	W	Н
MM-1900	53	38	43	16	37	MM-2012	83	82	69	53	60
MM-2002	72	51	60	28	51	MM-2013	60	38	50	20	43
MM-2004	85	60	70	40	59	MM-2014	83	79	69	53	60
MM-2005	85	65	70	40	59	MM-2015	92	80	83	60	70
MM-2006	46	32	37	16	32	MM-2017	48	35	38	16	32
MM-2007	54	47	44	29	35	MM-2018	54	41	43	22	36
MM-2008	85	63	70	40	59	MM-2026	78	90	96	51	80
MM-2011	71	58	60	33	51	MM-2027	95	95	115	51	95





COILS AND

PB PUBLICATIONS

INSULATION RATINGS ON ALL MAINS CHASSIS MOUNT TRANSFORMERS

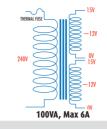
Insulation Resistance		Dielectric Strength				
Primary - Secondary	100MΩ @ 500V DC	Primary - Secondary	4000V AC 1 Minute			
Primary - Core	100MΩ @ 500V DC	Primary - Core	4000V AC 1 Minute			
Secondary - Core	100MΩ @ 500V DC	Secondary - Core	1000V AC 1 Minute			

Build Your Own Coils and Transformers Book

This book is a wealth of information, ideal for hobbyist or anybody interested in winding their own transformers After the introduction the book covers attributes of coils/transformers, mutual inductance, reactance, resonance, impedance, coil selectivity. It then goes on to the design aspects - discussing coils in tuning circuits, types of formers and cores, types of winding, self capacity, equations, coil design, design of IF transformers then output and power transformers. 300 K

• 55 pages 137 x 212 mm

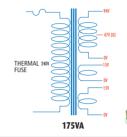
7	Cat.	Qty 1+
	BM-2440	\$7.50





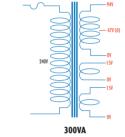
100VA, max 6A when connected in parallel.

Qty 2+ MM-2015 \$29.95 \$26.90 \$23.70





MM-2026 \$44.95





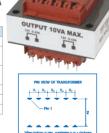
Qty 2+ MM-2027 \$59.95 \$53.95 \$47.90

10VA PCB Mount Power Transformers

These quality transformers are manufactured to AS3108. They have split bobbin construction and 2 entirely separate secondaries. Each unit is protected by a 126°C 250V 2A rated thermal fuse in the primary winding.

Specifications:	
Input	240V AC 50Hz
Output secondaries may be connected in series or parallel	
Cat. MF-1202	5V@480mA 12V@100mA (2 tappings)
Cat. MF-1212	12+12V @410mA
Dimensions	36(H) x 48(W) x 40(D) mm
Weight	470 grams

PIN SPACING mm X1 X2 X3 X4 Z 5 5 5 27.5 10VA & 12VA



Pin connection diagram

7	Cat.	Qty 1+	Qty 2+	Qty 4+
5V	MF-1202	\$15.95	\$14.35	\$12.70
12V + 12V	MF-1212	\$18.95	\$16.95	\$14.95

Press Pahn Insulation Material

This product is similar to a heavily pressed craft-type board. It is used as an insulator in mains products. It can be scored, folded and formed into many shapes, particularly into boxes or partitions to isolate mains circuits from fingers. It has good abrasion resistance and is often used in areas where

A sheet 0.8 x 225 x 208mm is supplied which should

- cover most applications.
 Thermal Rating 150°C
- Class E Thermal Rating
- Dielectric Strength 12kV/mm.

chafing from vibration can occur.

7	Cat.		Qty 4+	
	HG-9985	\$4.95	\$4.45	\$3.90

Transformers - Toroidal

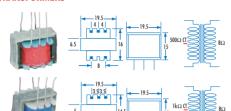
Miniature Transformers

MINIATURE OUTPUT TRANSFORMERS

- · Primary/secondary 500 ohms ct/8 ohms
- Iron core

STANDARD





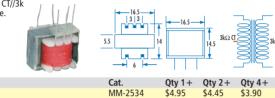
Primary/secondary 1k ohm ct/8 ohms

350mW rating.

7		Cat.	Qty 1+	Qty 2+	Qty 4+
	Miniature	MM-2530	\$5.95	\$5.25	\$4.75
	Standard	MM-2532	\$4.95	\$4.45	\$3.90

MINIATURE COUPLING TRANSFORMER

• 3k ohm CT//3k • Iron core.



Miniature Strobe Trigger Transformer

Used to trigger small XENON discharge lamps such as our

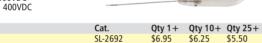


MM-2520

Xenon Flash Tube

As used in strobe kits.

 Operating Voltage:
 Minimum = 250VDC
 Nominal = 300VDC Maximum = 400VDC



5W Line Speaker Transformer



Designed to tap 100V (or 70V 1/2 power) public address amplifier lines to use an 8Ω speaker. Made with grain oriented steel for good frequency response. Good dynamic range. Primary taps enable you to select power level for 8Ω speaker. Connect primary to C (100V) and tap for whatever sound level is required from 0.5-5WRMS

\$2.60

Supplied with terminal block mounted on top of transformer. Mounting hole centres 53mm

Primary	Power
20k	0.5W
10k	1W
5k	2W
2.5k	5W

7	Cat.	Qty 1+	Qty 2+	Qty 4+
	MM-1900	\$10.95	\$9.75	\$8.75

600/600 Ohm Isolation Transformer

Specially designed for connecting electronic circuits to telephone lines. High dielectric insulation. PCB mounting, will handle guite substantial signals without saturation ACMA approved.

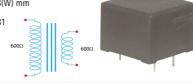


MA-1510

600/600 Ohm Isolation Transformer

This epoxy encapsulated isolation transformer is designed for connecting electronic equipment to the telephone system. It is a very small size which makes it ideal for use on PCBs in confined spaces.

- Measures just 18(L) x 14(H) x 18(W) mm
- PCB hole size: 0.7mm
- · Approval number: A94 4/LTD/181



MA-1512

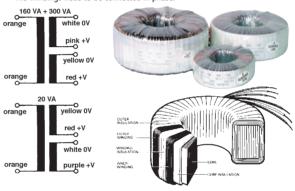
TOROIDALS

WHY A TOROID?

- Smaller size and weight to meet modern 'slimline' requirements
- Low electrically induced noise demanded by compact equipment
 High efficiency enabling conservative rating whilst maintaining size advantages
- Simple, quick, single bolt mounting

The Toroidal transformer is now accepted as the standard in the industry, quality made to ISO 9000 overtaking the obsolete laminated type. Industry has been quick to recognise the advantage toroidals offer in size, weight and lower radiated field. Current ratings on toroidal transformers. Can be used in 2 ways:-

A) both secondary windings in series - double the volts
B) both secondary windings in parallel - higher amps.
The windings need to be connected in phase.



20VA LOW PROFILE • Dimensions: O/D 75, I/D 21 x 30mm The height is only 30mm, which means they will fit into a 44mm rack case.

Cat.		Secondary Series	Secondary Parallel
MT-2082	9+9 Volts	1.11 amps	2.22 amps
MT-2084	12+12 Volts	0.833 amps	1.66 amps
MT-2086	15+15 Volts	0.666 amps	1.333 amps

7				Qty 1+	Qty 2+	Qty 4+
	9V	20VA	MT-2082	\$23.95	\$21.35	\$18.95
	12V	20VA	MT-2084	\$23.95	\$21.35	\$18.95
	15V	20VA	MT-2086	\$23.95	\$21.35	\$18.95

160VA TOROIDS • Dimensions: 110 O/D x 50 I/D x 40(H)mm

Cat.		Secondary Series	Secondary Parallel
MT-2112	12+12 Volts	6.66 amps	13.33 amps
MT-2113	18+18 Volts	4.44 amps	8.88 amps
MT-2114	25+25 Volts	3.2 amps	6.4 amps

7				Qty 1+	Qty 2+	Qty 4+
	9V	160VA	MT-2112	\$54.95	\$49.45	\$43.90
	12V	160VA	MT-2113	\$54.95	\$49.45	\$43.90
	15V	160VA	MT-2114	\$54.95	\$49.45	\$43.90

300VA TOROIDS • Dimensions: 125 O/D x 54 I/D x 55(H)mm.

Cat.		Secondary Series	Secondary Parallel			
MT-2130	12+12 Volts	12.5 amps	25.0 amps			
MT-2132	18+18 Volts	8.33 amps	16.6 amps			
MT-2140	40+40 Volts	3.75 amps	7.5 amps			
MT-2144	50+50 Volts	3.0 amps	6.0 amps			

7		Qty 1+	Qty 2+	Qty 4+
12V 300VA	MT-2130	\$84.95	\$76.50	\$67.95
18V 300VA	MT-2132	\$84.95	\$76.50	\$67.95
40V 300VA	MT-2140	\$84.95	\$76.50	\$67.95
50V 300VA	MT-2144	\$84.95	\$76.50	\$67.95

500VA TOROID • Dimensions: 126 O/D x 41 I/D x 63(H)mm.

Suits our Studio-350 amplifier kit (KC-5372)

Cat.	Secondary Series			
MT-2146 50+50 Volts	5 amps			
7	Cat.	Qty 1+	Qty 2+	Qty 4+
50V 500VA	MT-2	146 \$125.00	\$112.95	\$99.95

\$12.95

MECHANICAL VENTILATION (FANS)



12VDC FANS

Suitable for computers, office machinery, appliances, copying machines, power units, amplifiers, automatic vending machines, air conditioning, medical equipment etc.

- Long life 60,000 hours at 25°C, 30,000 hours at 40°C Ball bearing: 100,000 hrs @ 25°C
- Operating temperature -20°C to +70°C
- Can be mounted on suction or discharge side
- Wiring will not burn out even if rotating parts are restricted



Size mm 5VDC AX	Depth mm	Operating Volt	Bearing Type	Air Volume (CFM)	Speed (RPM)	Connection	Housing	Tacho	Cat	Page
30	6	5VDC	Ball	3.1	8,000	Flylead	Plastic	No	YX-2500	93
12VDC A	XIAL FANS				-,	,				
30	6	12VDC	Ball	3.1	8,000	Flylead	Plastic	No	YX-2501	93
40	10	12VDC	Ball	5.4	6.000	Flylead	Plastic	No	YX-2503	94
40	20	12VDC	Sleeve	7.6	7,000	Flylead	Plastic	No	YX-2502	94
40	10	12VDC	Ball	5.4	6,000	Flylead & Plug	Plastic	Yes	XC-5054	94
50	15	12VDC	Sleeve	16.6	5,500	Flylead	Plastic	No	YX-2504	94
50	10	12VDC	Ball	11.6	5,500	Flylead & Plug	Plastic	Yes	XC-5055	94
60	25.4	12VDC	Sleeve	20	4,000	Flylead	Plastic	No	YX-2505	94
80	25.4	12VDC	Sleeve	34	3,000	Flylead	Plastic	No	YX-2512	95
80	25.4	12VDC	Ball	34	3,000	Flylead	Plastic	No	YX-2513	95
80	20	12VDC	Ball	42	3,100	Flylead	Plastic	No	YX-2523	95
80	25	12VDC	Magnetic	28.1	2,000	Flylead	Polycarbonate	No	YX-2580 *	97
80	25	12VDC	Ball	20.7	1,600	3 Pin Molex	Polycarbonate	No	YX-2570 *	97
90	25	12VDC	Sleeve	59	3,000	Flylead	Plastic	No	YX-2521	95
92	25	12VDC	Magnetic	39.8	2,000	Flylead	Polycarbonate	No	YX-2582 *	97
92	25	12VDC	Ball	31.3	1,500	3 Pin Molex	Polycarbonate	No	YX-2572 *	97
120	25.4	12VDC	Ball	88	3,000	Flylead	Plastic	No	YX-2518	95
120	25	12VDC	Ball	88	3,000	Flylead	Plastic	No	YX-2522	95
120	25	12VDC	Magnetic	64.3	1,500	Flylead	Polycarbonate	No	YX-2584 *	97
120	25	12VDC	Ball	37	1,000	3 Pin Molex	Polycarbonate	No	YX-2574 *	97
12VDC B	LOWER FANS						,			
76 x 75	30	12VDC	Sleeve	9.5	2,700	Flylead	Plastic	No	YX-2530	93
97 x 94	33	12VDC	Ball	26	3,600	Flylead	Plastic	No	YX-2532	93
24VDC A	XIAL FAN									
80	25.4	24VDC	Ball	40	3,200	Flylead	Plastic	No	YX-2542	95
240VAC	AXIAL FANS					,				
80	25.4	240VAC	Sleeve	23	2,800	Flylead	Metal	No	YX-2509	96
80	38	240VAC	Sleeve	30	2,800	Flylead	Metal	No	YX-2510	96
80	38	240VAC	Ball	30	2,800	Flylead	Metal	No	YX-2508	96
120	25.4	240VAC	Sleeve	80	2,350	Solder	Metal	No	YX-2516	96
120	38	240VAC	Sleeve	105	3,000	Solder	Metal	No	YX-2514	96
120	38	240VAC	Ball	105	3,000	Solder	Metal	No	YX-2517	96
150	55	240VAC	Ball	230	3,400	Use PS-4160	Metal	No	YX-2520	97

Note: Fans with * on page 97 are not Sirocco brand and have specific technical data. Please refer to that page.

TECH TIP All 240V rated fans work equally well on 230V mains

76mm x 75mm Blower Fan - 2 Wire 40 Ideal for applications where space is limited but high air volume is required. Qty 10+ 12VDC 76 x 75mm YX-2530 \$12.95 \$11.35 \$10.35 97mm x 94mm Blower A=97mm B=33mm C=94mm В Fan Ball Bearing - 2 Wire \bigoplus Ideal for applications where space is limited but high air volume is required. D Cat YX-2532 Qty 1+ \$29.95 Qty 4+ Qty 10+ \$23.70 12VDC 97 x 94mm \$26.90 30mm Thin - 2 Wire

YX-2500

YX-2501

\$13.95

\$13.95

\$12.35

\$12.35

riousing	riastic, histograss inica
Impeller	Plastic, fibreglass filled
Connections	Flylead
Specifications	YX-2532
Voltage (V)	12VDC
Current (mA)	860
Dimensions (mm)	97 x 94 x 33
Air volume (m3/min)	0.74
Air volume (CFM)	26
Speed (RPM)	3600
Noise (dBA)	51
Bearing	Ball
Housing	Plastic, fibreglass filled
Impeller	Plastic, fibreglass filled
c	EL L

Flylead

YX-2530 12VDC 200

0.27

2700

32

76 x 75 x 30

Plastic, fibreglass filled

Specifications Voltage (V) Current (mA)

Speed (RPM)

Connections

Noise (dBA)

Bearing Housing

Dimensions (mm)

Air volume (m3/min) Air volume (CFM)

(33	
breglass filled breglass filled	10

Specifications	YX-2500	YX-2501
Voltage (V)	5VDC	12VDC
Current (mA)	200	120
Dimensions (mm)	30 x 30 x 6	
Air Volume (M3/min)	3.1	
Air Volume (CFM)	108	
Speed (RPM)	8,000	
Noise (dBA)	27	
Bearing System	Ball	
Housing	Plastic, GRP filled	
Impeller	Plastic, GRP filled	
Connections	Flylead	



30 x 30mm

30 x 30mm

5VDC

12VDC

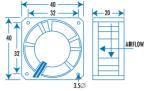
Qty 10+

\$10.95

\$10.95

12VDC FANS (CONTINUED)

40mm - 2 Wire

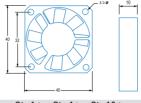


,			Cat	Qty 1+	Qty 4+	Qty 10+
	12VDC	40mm	YX-2502	\$19.95	\$17.70	\$15.70

Specifications	YX-2502
Voltage (V)	12VDC
Current (mA)	100
Dimensions (mm)	40 x 40 x 20
Air volume (m3/min)	0.215
Air volume (CFM)	7.6
Speed (RPM)	7000
Noise (dBA)	32
Bearing	Sleeve
Housing	Plastic, fibreglass filled
Impeller	Plastic, fibreglass filled
Connections	Flylead



40mm Thin - 2 Wire

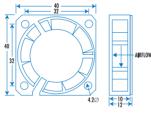


7			Cat	Qty 1+	Qty 4+	Qty 10+
	12VDC	40mm	YX-2503	\$16.95	\$14.95	\$13.35

Specifications	YX-2503	
Voltage (V)	12VDC	
Current (mA)	80	6
Dimensions (mm)	40 x 40 x 10	
Air volume (m3/min)	0.16	
Air volume (CFM)	5.4	
Speed (RPM)	6000	
Noise (dBA)	30	
Bearing	Ball	
Housing	Plastic, fibreglass filled	
Impeller	Plastic, fibreglass filled	
Connections	Flylead	

40mm Ball Bearing - 3 Wire

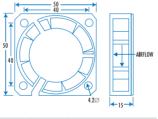
The third wire provides a pulse output - 1 pulse per revolution.



7		Cat	Qty 1+	Qty 4+	Qty 10+
12VDC	40mm	XC-5054	\$15.90	\$13.95	\$12.70

50mm Thin - 2 Wire

ELECTROMECHANICAL

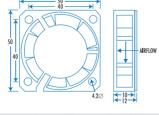


7		Cat	Qty 1+	Qty 4+	Qty 10+
12VDC	50mm	YX-2504	\$17.95	\$15.95	\$14.35



50mm Ball Bearing - 3 Wire

The third wire provides a pulse output - 1 pulse per revolution.

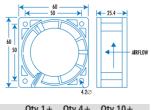


7			Cat	Qty 1+	Qty 4+	Qty 10+
	12VDC	50mm	XC-5055	\$15.90	\$13.95	\$12.70

Specifications XC-5055 Voltage (V) 12VDC Current (mA) 130 Dimensions (mm) 50 x 50 x 10 Air volume (m3/min) 0.33 Air volume (CFM) 11.6 Speed (RPM) 5500 Noise (dBA) 31 Bearing Ball Housing Plastic, fibreglass filled Impeller Plastic, fibreglass filled Connections Flylead



60mm - 2 Wire



7			Cat	Qty 1+	Qty 4+	Qty 10+
	12VDC	60mm	YX-2505	\$17.95	\$15.95	\$14.35

Specifications	YX-2505	
Voltage (V)	12VDC	
Current (mA)	130	
Dimensions (mm)	60 x 60 x 25.4	
Air volume (m3/min)	0.57	
Air volume (CFM)	20	-
Speed (RPM)	4000	OC DECIMAL PROPERTY AND INCOME.
Noise (dBA)	30	WHEN THE PERSON
Bearing	Sleeve	WECEC.
Housing	Plastic, fibreglass filled Plastic, fibreglass filled	And in Chessia
mpeller	Plastic, fibreglass filled	
Connections	Flylead	CA V

12VDC FANS (CONTINUED)



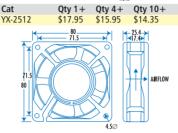
Cat

80mm Ball Bearing - 2 Wire

12VDC

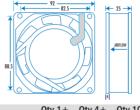
 \bullet Life 100,000 hours at 25 $^{\circ}\text{C}$

80mm



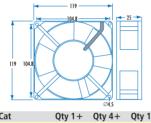
7			Cat	Qty 1+	Qty 4+	Qty 10+
	12VDC	80mm	YX-2513	\$19.95	\$17.70	\$15.70

90mm - 2 Wire Fan



7			Cat	Qty 1+	Qty 4+	Qty 10+
	12VDC	90mm	YX-2521	\$19.95	\$17.70	\$15.70

120mm Thin Ball Bearing - 2 Wire



					Ø4.5		
2	7		Cat	Qty 1+	Qty 4+	Qty 10+	
	12VDC	120mm	YX-2518	\$28.95	\$25.95	\$22.95	
	Pall Pooring IDEE						

Specifications Voltage (V) Current (mA) YX-2512 12VD0 80 x 80 x 25.4 Dimensions (mm) Air volume (m3/min) Air volume (CFM) Speed (RPM) Noise (dBA) 0.97 3000 Bearing Sleeve Plastic, fibreglass filled Plastic, fibreglass filled Housing Impeller Connections Flylead

Specifications	YX-2513
Voltage (V)	12VDC
Current (mA)	200
Dimensions (mm)	80 x 80 x 25.4
Air volume (m3/min)	0.97
Air volume (CFM)	34
Speed (RPM)	3000
Noise (dBA)	32
Bearing	Ball
Housing	Plastic, fibreglass filled Plastic, fibreglass filled
Impeller	Plastic, fibreglass filled
Connections	Flylead

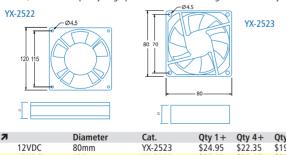


Specifications	YX-2521	
oltage (V)	12VDC	
Current (mA)	320	
imensions (mm)	90 x 90 x 25	
ir volume (m3/min)	1.67	VALUE
ir volume (CFM)	59	A STATE OF
peed (RPM)	3000	
loise (dBA)	36	1.0
earing	Sleeve	100
lousing	Plastic, fibreglass filled	
mpeller	Plastic, fibreglass filled	1
onnections	Flylead	

Specifications	YX-2518	-4
Voltage (V)	12VDC	
Current (mA)	360	
Dimensions (mm)	120 x 120 x 25.4	
Air volume (m3/min)	2.3	- 100
Air volume (CFM)	80	VIII.
Speed (RPM)	3000	100
Noise (dBA)	42	1 6
Bearing	Ball	- IIA
Housing	Plastic, fibreglass filled	1
Impeller	Plastic, fibreglass filled	1
Connections	Flylead	

Ball Bearing IP55

IP55 rating on a fan which is extremely important, particularly when the fan is located in an environment where dust particles, soot etc can quickly clog up a standard fan and bring it to failure early in life.



7	Diameter	Cat.	Qty 1+	Qty 4+	Qty 10+
12VDC	80mm	YX-2523	\$24.95	\$22.35	\$19.70
12VDC	120mm	YX-2522	\$36.95	\$33.45	\$29.45

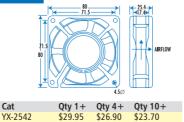
			THE RESERVE AND ADDRESS OF THE PARTY OF THE
Specifications	YX-2522	YX-2523	
Voltage (V)	12VDC	12VDC	
Current (mA)	60	200	SUG ASSICE
Dimensions (mm)	120 x 120 x 25	80 x 80 x20	THE STREET OF STREET
Air volume (m3/min)	3	1.2	
Air volume (CFM)	106	42	
Speed (RPM)	3000	3100	
Noise (dBA)	45	32	
Bearing	Ball	Ball	
Housing	Plastic, fibreglass filled	Plastic, fibreglas	ss filled
Impeller	Plastic, fibreglass filled	Plastic, fibreglas	ss filled
Connections	Flylead	Flylead	
Other	IP55	IP55	

24VDC FANS

24VDC

80mm 24VDC Thin Ball Bearing Version - 2 Wire

Life expectancy 100,000 hours @ 25°C.



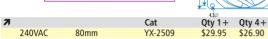
Specifications	YX-2542	
Voltage (V)	24VDC	
Current (mA)	130	
Dimensions (mm)	80 x 80 x 25.4	
Air volume (m3/min)	1.1	
Air volume (CFM)	40	1000
Speed (RPM)	3200	MGGEL YX2543
Noise (dBA)	35	Esh (Co-
Bearing	Ball	
Housing	Plastic, fibreglass filled	
Impeller	Plastic, fibreglass filled	
Connections	Flylead	

80mm

240VAC FANS 80mm Thin

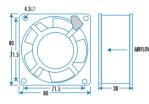
2 Wire

All 240V rated fans work equally well on 230V mains



Specifications	YX-2509	Marie
Voltage (V)	240VAC	
Current (mA)	100	
Dimensions (mm)	80 x 80 x 25.4	
Air volume (m3/min)	0.67	SICOSCO
Air volume (CFM)	23	MODEL YOUR FAN
Speed (RPM)	2800	MODEL YX2500 SLEEVE BEARING AC230/240V SOHE
Noise (dBA)	33	120mA 50Hz
Bearing	Sleeve	OF CECED
Housing	Diecast zinc, aluminium	MADE IN TAIMAN
Impeller	Plastic, fibreglass filled	THE PARTY OF THE P
Connections	Flylead	

80mm Standard - 2 Wire

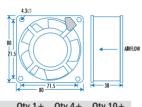


Qty 10+ \$23.70

7			Cat	Qty 1+	Qty 4+	Qty 10+
	240VAC	80mm	YX-2510	\$29.95	\$26.90	\$23.70

	YX-2510	
Voltage (V)	240VAC	
Current (mA)	80	- 1
Dimensions (mm)	80 x 80 x 38	
Air volume (m3/min)	0.88	
Air volume (CFM)	30	*(Eco
	2800	SCHLYEST BATTE HARRE
	35	100ma
Bearing		afecto-
Housing	Diecast aluminium,	
	powdercoated	
Connections	Flylead	
	Dimensions (mm) Air volume (m3/min)	Voltage (V) 240VAC Current (mA) 80 Dimensions (mm) 80 x 80 x 38 Air volume (GFM) 30 Speed (RPM) 2800 Noise (dBA) 35 Bearing Sleeve Housing powdercoated Impeller Plastic, fibreglass filled

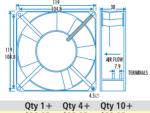
80mm Ball Bearing - 2 Wire



7			Cat	Qty 1+	Qty 4+	Qty 10+
	240VAC	80mm	YX-2508	\$36.95	\$33.45	\$29.45

Specifications	YX-2508	
Voltage (V)	240VAC	
Current (mA)	100	
Dimensions (mm)	80 x 80 x 38	-0
Air volume (m3/min)	0.88	
Air volume (CFM)	30	
Speed (RPM)	2800	*irocco
Noise (dBA)	32	MODEL YXZION BALL
Bearing	Ball	AC230/240V SOLE
Housing	Diecast aluminium,	CAC C CO
nousing	powdercoated	ALCO INTERNAL
Impeller	Plastic, fibreglass filled	
Connections	Flylead	
Other	Life - 100,000 hrs@25°C	A AVE

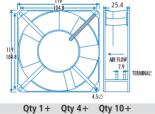
120mm - 2 Wire



7			Cat	Qty 1+	Qty 4+	Qty 10+
	240VAC	120mm	YX-2514	\$28.95	\$25.95	\$22.95

Specifications	YX-2514	
Voltage (V)	240VAC	
Current (mA)	125	3/10
Dimensions (mm)	120 x 120 x 38	
Air volume (m3/min)	3	
Air volume (CFM)	105	
Speed (RPM)	3000	(///
Noise (dBA)	47	
Bearing	Sleeve	
Housing	Diecast aluminium	
Impeller	Plastic, fibreglass filled	
Connections	Solder lugs	
Other	-	

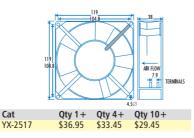
120mm Thin - 2 Wire



7		Cat	Qty 1+	Qty 4+	Qty 10+	
240VAC	120mm	YX-2516	\$29.95	\$26.90	\$23.70	

Specifications	YX-2516	
Voltage (V)	240VAC	O Company
Current (mA)	120	
Dimensions (mm)	120 x 120 x 25.4	
Air volume (m3/min)	2.3	
Air volume (CFM)	80	alforce
Speed (RPM)	2350	SCOIL YEST REFERENCE
Noise (dBA)	44	Glina Glina
Bearing	Sleeve	N. C. T. C.
Housing	Diecast aluminium	and a second
Impeller	Plastic, fibreglass filled	
Connections	Flylead	
Other	-	

120mm Ball Bearing - 2 Wire



Specifications	YX-2517	
Voltage (V)	240VAC	,
Current (mA)	125	
Dimensions (mm)	120 x 120 x 38	
Air volume (m3/min)	3	
Air volume (CFM)	105	sirocco
Speed (RPM)	3000	MODEL VESST BALL SEASON
Noise (dBA)	47	ACCOMPANY STATE
Bearing	Ball	of CEC-
Housing	Diecast aluminium	MADE IN YASTIAN
Impeller	Plastic, fibreglass filled	
Connections	Flylead	
Other	-	

120mm

240VAC

Fans – 240VAC, Maglev & Hydrodynamic

reactive. Rubber fan mounts are also included to eliminate fan motor vibrations entering the case, further reducing noise levels. Dust and water proof to IP54, these fans are sure to last

240VAC FANS (CONTINUED)

150mm - 2 Wire Fan



	4
Qty 10	0+
\$67.95	5

even in harsh conditions

Specifications	YX-2520	
Voltage (V)	240VAC	
Current (mA)	290	
Dimensions (mm)	150 x 172 x 55	
Air volume (m3/min)	6.57	Comp.
Air volume (CFM)	230	afforco
Speed (RPM)	3400	MODEL POTARY FAN
Noise (dBA)	53	PARTITION SONS
Bearing	Ball	CEC-
Housing	Diecast aluminium	Acres de Fallman
Impeller	Plastic, fibreglass filled	
Connections	Flylead	
Other	-	

12VDC MAGLEV & HYDRODYNAMIC FANS

150mm

Super Long-Life Low-Noise MagLev Bearing Case Fans and also offers the ability for the fan impeller to be removed for cleaning. The fan impeller itself has a winglet tip design and is UV

YX-2520

Featuring a patented Nanoflux bearing that incorporates magnetic levitation (maglev) technology and precise manufacturing, these premium quality fans ensure an extremely long operational life of 100,000hrs at 40°C (even longer at 25°C). Not only does the unique self-lubricating maglev bearing design offer extremely long life, but also extremely low noise levels compared to traditional ball bearings,

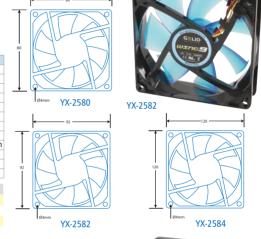
- Flylead with 3 pin molex connector
- Black: earth, Red: 12V+, Yellow: Tacho output (1 pulse/rev)
 Nanoflux magnetic levitation bearings
- Polycarbonate housing

240VAC

• UV reactive polycarbonate impellers

Specifications	YX-2580	YX-2582	YX-2584
Voltage (V)	12VDC	12VDC	12VDC
Starting voltage (V)	5VDC	5VDC	5VDC
Current (mA)	100	180	220
Dimensions (mm)	80 x 80 x 25	92 x 92 x 25	120 x 120 x 25
Air volume (m3/min)	0.8	1.13	1.82
Air volume (CFM)	28.1	39.8	64.3
Speed (RPM)	2000	2000	1500
Noise (dBA)	21	22.5	25
Bearings	Nanoflux magnetic levitation	Nanoflux magnetic levitation	Nanoflux magnetic levitation
Housing	Polycarbonate	Polycarbonate	Polycarbonate
Impellers	UV reactive polycarbonate	UV reactive polycarbonate	UV reactive polycarbonate
Connections	Flylead with 3 pin molex	Flylead with 3 pin molex	Flylead with 3 pin molex
-	C-+	04.11.04.	4

7		Cat	Qty 1+	Qty 4+	Qty 10+
12VDC	80mm	YX-2580	\$24.95	\$22.35	\$19.70
12VDC	90mm	YX-2582	\$29.95	\$26.90	\$23.70
12VDC	120mm	YX-2584	\$34.95	\$31.45	\$27.90



Silent Hydrodynamic Bearing Case Fans

Designed to provide additional airflow without increasing noise levels these fans have precisely balanced blades and long-life hydro-dynamic bearing. Ultra-low noise making these fans are perfect for a home theatre PC, or ventilating the amplifier wedged into your entertainment unit. To further

improve silence, rubber fan mounts are included to eliminate fan motor vibrations inducing vibration noise

• Rated to last for 50,000 hours at 40°C (more at 25°C)

Specifications	YX-2570	YX-2572	YX-2574
Voltage (V)	12VDC	12VDC	12VDC
Current (mA)	80	130	80
Dimensions (mm)	80 x 80 x 25	92 x 92 x 25	120 x 120 x 25
Air volume (m3/min)	0.59	0.89	1.05
Air volume (CFM)	20.7	31.3	37
Speed (RPM)	1600	1500	1000
Noise (dBA)	18	20	20.2
Bearings	Ball (hydrodynamic)	Ball (hydrodynamic)	Ball (hydrodynamic)
Housing	Polycarbonate	Polycarbonate	Polycarbonate
Impellers	Polycarbonate	Polycarbonate	Polycarbonate
Connections	Flylead with 3 Pin Molex	Flylead with 3 Pin Molex	Flylead with 3 Pin Molex

7		Cat	Qty 1+	Qty 4+	Qty 10+
12VDC	80mm	YX-2570	\$19.95	\$17.70	\$15.70
12VDC	90mm	YX-2572	\$24.95	\$22.35	\$19.70
12VDC	120mm	YX-2574	\$28.95	\$25.95	\$22.95

YX-2570



YX-2511

FAN ACCESSORIES

Fan Power Lead

This lead is for use with our 240VAC fans with two lugs for power connection. It comes with a moulded plug to suit fan one end, and

bare wires at the other.				
7	Cat	Qty 1+	Qty 4+	Qty 10+
	PS-4160	\$3.95	\$3.45	\$3.15

Plastic Fan Guard / Filter Kits

Foam filter prevents dust particles entering the fan. Rated to UL 94V-0.

- We recommend periodic cleaning of the foam filter to prevent clogging and restricting air flow.

 • Available in 3 sizes.

			1	•		
1	7	Cat	Qty 1+	Qty 4+	Qty 10+	
	60mm	YX-2550	\$6.95	\$6.25	\$5.50	
	80mm	YX-2552	\$6.95	\$6.25	\$5.50	
	120mm	YX-2554	\$7.95	\$6.95	\$6.25	

Fan Finger Guards





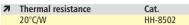


7	Cat	Qty 1+	Qty 4+	Qty 10+
80mm	YX-2511	\$3.95	\$3.45	\$3.15
120mm	YX-2515	\$4.95	\$4.45	\$3.90
150mm	YX-2525	\$8.95	\$7.95	\$6.95

TO-220 Mini (6073B Type)

• Equivalent to popular 6073 type.



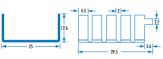


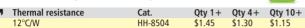


Qty 4+ Qty 10+ \$0.75 \$0.65

TO-220 (6021 Type)

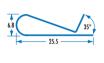
· Solderable PCB mounting pins





TO-220 Clip-on (6043 Type)

The heatsink will just clip over a device when required for permanent or temporary installation.







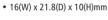
7	Thermal resistance
	30°C/W

Otv 4+ Qty 10+ Cat Qty 1+ HH-8503 \$1.05 \$1.20

TO-220

ELECTROMECHANICAL

These PCB mount heatsinks have two 'screw flute' channels to aid in fastening the sink to a board or surface.



	•	,	•			
7	Т	hermal	re	sista	nce	
	3	0°C/W				





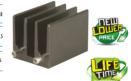
7	Thermal resistance	Cat.	Qty 1+	Qty 4
	30°C/W	HH-8514	\$1.75	\$1.55

TO-220

Same dimensions as our HH-8514 only with longer fins. These PCB mount heatsinks have two tinned pins to aid in fastening the sink to a board or surface.

- 16(W) x 21.8(D) x 15.8(H)mm
- Pins 2mm dia. x 3mm long



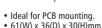


\$1.40

7	Thermal resistance	Cat.	Qty 1+	Qty 4+	Qty 10+
	19°C/W	HH-8516	\$1.55	\$1.35	\$1.20

Universal "U" Type

Universal hole pattern allows mounting of nearly every power transistor, as well as flat packs.





• 6	1(W) x 36(D) x 30(H)mm
7	Thermal resistance

7	Thermal resistance
	6°C/W



HH-8511

HH-8510



\$2.45

TO-3 Minifin (AV/ML 16C Type) Drilled to suit TO-3 case. This

heatsink gives incredible heat dissipation due to its unique fin design.

• 50(L) x 50(W) x 25(H)mm.



PC Mount TO-3P

Will accept up to TO-3P size flat pack transistors. (This includes TO-220). Includes 2 PC pins, which help stabilise the heatsink and allow you to solder to PCB pads.

• 2 sizes.

25MM HIGH (6098 TYPE)

 Size 33.6(W) x 12(D) x 25(H)mm. Cat. HH-8520

40MM HIGH (6099 TYPE)

 Size 33.6(W) x 12(D) x 40(H)mm. Cat. HH-8522



	PRICE	±2√\1±°	V V	2	alled .		
7	Thermal resista	nce	Cat.	Qty 1+	Qty 4+	Qty 10+	
	17°C/W		HH-8520	\$1.55	\$1.35	\$1.20	
	11°C/W		HH-8522	\$2.65	\$2.30	\$1 95	

Heavy Duty TO-3P (ML97 Type)

Heavy duty version of the heatsinks described above

 Solderable screw studs. Size 42(W) x



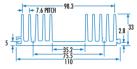




7	Thermal resistance	Cat.	Qty 1+	Qty 4+	Qty 10+
	7.5°C/W	HH-8526	\$2.75	\$2.45	\$2.15

Versatile Heavy Duty

- · Allows horizontal & vertical mounting.
- Length 72mm
- Undrilled.

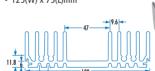




7	Thermal resistance	Cat.	Qty 1+	Qty 4+	Qty 10+
	2.2°C/W	HH-8566	\$13.95	\$12.35	\$10.95

Super Heavy Duty

This black anodised heatsink is 36mm high. Unique recessed channels are incorporated into the flat side to accommodate screws, panels, heatsink brackets, etc.



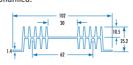


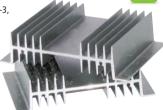
Thermal resistance	Cat.	Qty 1+	Qty 4+	Qty 10+
1.4°C/W	HH-8590	\$19.95	\$17.70	\$15.70

Economy Power

This unit has fins on both top and bottom.

- Accepts two of each type transistors TO-3, TO-126 and TO-220. • Length 72mm.
- Undrilled.



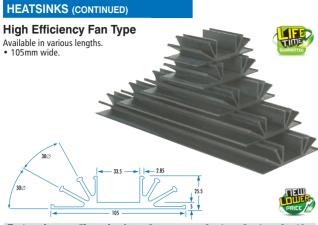


7	Thermal resistance	Cat.	Qty 1+	Qty 4+	Qty 10+
	2.7°C/W	HH-8560	\$8.50	\$7.50	\$6.75

5°C/W

Thermal resistance

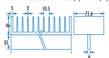
Heatsinks & Accessories



4	105 —	-	1		PRICE
Length	Thermal resist.	Cat.	Qty 1+	Qty 4+	Qty 10+
55mm	2.5°C/W	HH-8570	\$5.95	\$5.25	\$4.75
72mm	2.2°C/W	HH-8572	\$8.95	\$7.95	\$6.95
135mm	1.1°C/W	HH-8573	\$11.95	\$10.70	\$9.50
225mm	0.9°C/W	HH-8574	\$17.95	\$15.95	\$14.35
300mm	0.7°C/W	HH-8578	\$21.95	\$19.70	\$17.35
	55mm 72mm 135mm 225mm	Length Thermal resist. 55mm 2.5°C/W 72mm 2.2°C/W 135mm 1.1°C/W 225mm 0.9°C/W	Length Thermal resist. Cat. 55mm 2.5°C/W HH-8570 72mm 2.2°C/W HH-8572 135mm 1.1°C/W HH-8573 225mm 0.9°C/W HH-8574	Length Thermal resist. Cat. Qty 1+ 55mm 2.5°C/W HH-8570 \$5.95 72mm 2.2°C/W HH-8572 \$8.95 135mm 1.1°C/W HH-8573 \$11.95 225mm 0.9°C/W HH-8574 \$17.95	Length Thermal resist. Cat. Qty 1+ Qty 4+ 55mm 2.5°C/W HH-8570 \$5.95 \$5.25 72mm 2.2°C/W HH-8572 \$8.95 \$7.95 135mm 1.1°C/W HH-8573 \$11.95 \$10.70 225mm 0.9°C/W HH-8574 \$17.95 \$15.95

Diecast

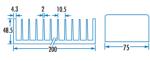
• Dimensions: 150(L) x 75(H) x 46(D)mm



HH-8550 - 35mm bracket HH-8555 - No bracket

7	Thermal resistance	Cat.	Qty 1+	Qty 4+	Qty 10
Bracket	0.784°C/W	HH-8550	\$23.95	\$21.35	\$18.95
No Bracket	1.2°C/W	HH-8555	\$19.95	\$17.70	\$15.70

Diecast



This heatsink has 20 fins and a flat base, so it will mount on a panel easily and can actually form the side panels

• Dimens

mensions: 200(L) x 75(W) x 48(H) mm finished length.				
Thermal resistance	Cat.	Qty 1+	Qty 4+	
0.552°C/W	HH-8546	\$25.95	\$23.35	





Qty 10+

\$20.70

Fan Assisted-Type Heatsink

This heatsink is designed to mate with itself to form a tunnel. The heatsink extrusion has a screw flute centre to enable 4 x No.6 self-tapping screws to fasten an 80mm standard type fan on one (or both) end/s to drive air through the heatsink assembly. It is ideal for high power amplifiers and power supplies. The entire assembly, including fan/s can still fit inside a 2 x Rackunit (88mm) enclosure. The heatsink also features ribbed fins for extra surface area, a 4mm thick base to enable thread tapping and small vee grooves on 5mm centres to facilitate mounting hole location. The centre groove, for example, is directly below the middle fin.

• Two standard lengths are available, black anodised

Suitable fans are YX-2512 (12V DC) or YX-2510 (240V AC).

Thermal Characteristics:		
ASSEMBLY TYPE	COOLING MODE	RATING (APPROX)
Single Length	Convection	0.83°C/W
Tunnel Assembly	Convection	0.70°C/W
Tunnel Assembly	Fan Assisted (single)	0.35°C/W
Tunnel Assembly	Fan Assisted (dual)	0.30°C/W

7	Cat.	Qty 1+	Qty 4+	Qty 10+
Length 225mm	HH-8530	\$22.50	\$19.95	\$17.95
Length 254mm	HH-8532	\$25.75	\$22.95	\$20.35

Note: 2 pictured







HEATSINKS ACCESSORIES

Heatsink Pin Grid Array with **Adhesive Thermal Transfer Tape**

This heatsink makes a perfect partner to Star LED modules. It doesn't get quicker or easier than this! Just peel the backing from the pre-mounted thermal transfer tape, press the Star LED (or whatever device) to the heatsink and SHAZAM!! It's ready to go!

Don't be fooled by the compact size. The "pin grid array" design provides excellent low thermal resistance and heat dissipation. Dimensions: 21(L) x 21(W) x 6.2(H)mm



7	Thermal resistance	Cat.	Qty 1+	Qty 4+	Qty 10+
	5.9°C/W	HH-8580	\$3.25	\$2.90	\$2.60

Transistor Clamps



7			Cat.	Qty 1+	Qty 10+	Qty 50+
Sing	le TO-220 Transistor Clamp	s Pk 10	HH-8600	\$5.95	\$5.25	\$4.15
Sing	le TO-220 Transistor Clamp	s Pk 100	HH-8602	\$19.95	\$17.70	\$15.70
Dual	TO-220 Transistor Clamp	s Pk 100	HH-8607	\$19.95	\$17.70	\$13.70
Dual	TO-220 Transistor Clamp	ea	HH-8610	\$1.00	\$0.90	\$0.80

25% Silver Heatsink Compound

Contains 25% Silver for more efficient heat transfer than standard compounds. Comes in a small ready to use syringe. Please note that Silver Heatsink Compound does conduct electricity and care should be taken when being used.
• Size: 1.5g

Cat. Qty 10+ 1.5a Tube NM-2013 \$5.95

Heatsink Compound

Heat conducting paste facilitates heat transfer from semiconductors to heatsinks. One 10g tube will do up to 30 TO-3 package transistors.

· Non electrically conductive

		11		
7	Cat.	Qty 1+	Qty 4+	Qty 10+
10g Tube	NM-2010	\$3.95	\$3.45	\$3.15
50g Syringe	NM-2011	\$9.95	\$8.75	\$7.75
150g Tube	NM-2012	\$19.95	\$17.70	\$15.70

Heatsink Compound - Adhesive

Non electrically conductive

• One 5 gram tube will adhere up to 16 TO-3 package transistors.



7	Cat.	Qty 1+	Qty 4+	Qty 10+
5g Tube	NM-2014	\$7.95	\$6.95	\$6.25

Thermal Transfer Tape 100 x 100 x 0.5mm - Pkt 2

When it comes to attaching devices like star LED modules to heatsinks, it's often not easy because they don't have screw 'eyes' like a TO220 transistor package. Using this thermal transfer tape, it's a breeze. The material is self adhesive and provides good thermal conductivity making it easy for chipsets, LED modules, memory modules etc. 2pcs of 100mm x 100mm sheets supplied. Just cut to size 0.5mm thickness

supplied. Just cut to size.o.5mm thickness.			
Specifications			
Thermal Conductivity	1.6 W/m-k		
Flammability Level	UL94V-0		
Working Temperature Range	-60 ~ +250°C		
Insulation Strength	>7,000V/mm		
_			

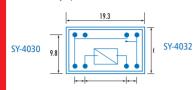
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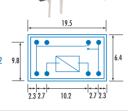
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	NM-2790	\$12.95	\$11.35	\$10.35

RELAYS

Dual-In-Line Reed Style Relays

They will fit into a 14 pin IC socket, are highly sensitive and can be driven by TTL, etc. Both are SPST normally open.



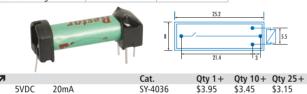


	SY-4030	SY-4032
Contact form	SPST normally open	SPST normally open
Coil Resistance	500Ω	1000Ω
Nominal Voltage	5V	12V
Rated Current	10mA	12mA
Pickup Voltage	3.75V DC	9.0V DC
Dropout Voltage	0.8V DC	1.0V DC
Allowable Voltage	160%	160%
Contact Rating	0.5A	0.5A

7			Cat.	Qty 1+	Qty 10+	Qty 25+
	5VDC	10mA	SY-4030	\$4.75	\$4.15	\$3.75
	12VDC	12mA	SY-4032	\$4.75	\$4.15	\$3.75

ECONOMY STYLE

	SY-4036	SY-4038
Contact form	SPST normally open	SPST normally open
Coil Resistance	500Ω	1050Ω
Nominal Voltage	5V	12V
Rated Current	20mA	11.4mA
Pickup Voltage	3.5V DC	8.4V DC
Dropout Voltage	0.5V DC	1.2V DC
Allowable Voltage	160%	160%
Power Consumption (W)	0.1	0.1
Contact Rating	1A	1A



SY-4038

\$3.95

\$3.45

RELAYS, LATCHING & NON-LATCHING

11.4mA

12VDC

As an electromechanical component, relays are incredibly reliable. They have been around for well over 100 years.



\$3.15

Most relays will operate switch contacts when power is applied across the coil that pulls or pushes a component called an armature.

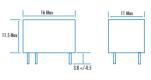
In some applications it is desirable to have the relay hold on even after the initial current has been initiated. This can be accomplished either electrically or mechanically. In both cases the application of another pulse into the coil resets the relay back to its original state. This operation is called latching. Mechanical latching relays do not necessarily require current to energise the coil. Electrical latching generally does but not always. There are simple circuits on the internet to show you how to wire a relay in latching mode.

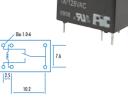
Freecall order hotline: 1800 022 888

STANDARD COIL / CONTACT RELAYS

DIL Type - 6V - Mini

Extra low profile. 6V DC bobbin 56 ohm coil resistance 1A / 125VAC PCB mount 1A contact rating. SPDT. Size 15 x 11 x 11(H)mm





7		Cat.	Qty 1+	Qty 10+	Qty 25+
125VAC	1A	SY-4058	\$7.95	\$6.95	\$6.25

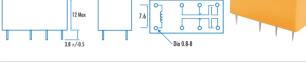
DIL Type - 12V - Mini

12 volt DPDT relay. 12V DC coil. Max switching power 60W Size 20 x 10 x 9(H) mm

21.2 Max

High sensitivity 200mW pickup power Coil resistance 360Ω.



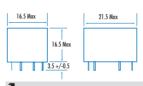


71	Cat.	Qty 1+	Qty 10+	Qty 25+
12VDC	SY-4059	\$9.95	\$8.75	\$7.75

MINI RELAYS, PCB TYPE

1A DPDT

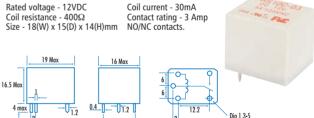
Rated voltage - 12VDC Coil current - 30mA Coil resistance - 400Ω Contact rating - 1 Amp Size - 21(W) x 16(D) x 15(H)mm.





71		Cat.	Qty 1+	Qty 10+	Qty 25+
12VDC	1A	SY-4061	\$4.95	\$4.45	\$3.90

3A SPDT

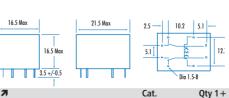


7		Cat.	Qty 1+	Qty 10+	Qty 25+
12VDC	3A	SY-4066	\$4.45	\$3.95	\$3.45

5A DPDT

Extra heavy duty mini relay Coil current - 30mA Contact rating - 5 Amp Size - 21(W) x 16(D) x 15(H)mm

Rated voltage - 12VDC Coil resistance - 400Ω Power consumption - 360mW NO/NC contacts.





	1	old 1.5 v			
7		Cat.	Qty 1+	Qty 10+	Qty 25+
12VDC	5A	SY-4062	\$5.95	\$5.25	\$4.75

MINI RELAYS, PCB TYPE (CONTINUED)

20A12V SPST PCB Mount Relay

PCB mounting 12V relay with QC lug terminals mounted conveniently on top of case. What a good idea!

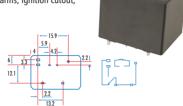


7			Cat.	Qty 1+	Qty 10+	Qty 25+
	12VDC	20A	SY-4029	\$8.95	\$7.95	\$6.95

30A SPDT - Standard Size (Horn Relay)

PCB version of standard 30A horn type relay. Whilst designed for auto horns, this relay is ideal for any high current application i.e. burglar alarms, ignition cutout, transmitters, car spotlights etc.

- Contact current (max) 40A
- Contact voltage (nom) 12VDC
- Nominal coil voltage 12VDC
- PC Pin termination



7			Cat.	Qty 1+	Qty 10+	Qty 25
	12VDC	30A	SY-4072	\$7.45	\$6.50	\$5.75

12VDC DPDT Latching

DIP style - will plug into 16 pin IC socket. Low profile. Highly sensitive - 180mW nominal power consumption.

Specifications Coil

2 coil latching - 12VDC Minimum set and reset power 180mW Nominal set and reset power 360mW

Specifications Contact Max switching power 60W, 125VA Max switching voltage 220VDC, 250VAC Max carrying current 2A @ 30VDC, 1A @ 120VAC

			3 3 3 2.5			
Ì	7	Cat.	Qty 1+	Qty 10+	Qty 25+	
	12VDC	SY-4060	\$12.95	\$11.35	\$10.35	

25.3 Ma

35+/-05

25.3 Max

3.5 +/- 0.5

29.2 Ma

0.3

Special PC Mount

Size 20(W) x 10(D) x 10(H)mm

Silver alloy contacts
• Telecoms grade

- **SPDT 12VDC** 12V DC.
- Coil 285 ohms.
- 10A @ 30VDC or 10A @ 240VAC contact rating.



 Coil 1100 ohms - 2 	24۱
• 2 x 5A @ 30VDC	or
2 x 5A@240VAC	
contact rating.	

• 29(W)x12	(D)x25(H)mm

7			Cat.	Qty 1+	Qty 10+	Qty 25+
	12VDC	SPDT	SY-4050	\$7.95	\$6.95	\$6.25
	12VDC	DPDT	SY-4052	\$8.95	\$7.95	\$6.95
	24VDC	DPDT	SY-4053	\$9.95	\$8.75	\$7.75

DIN Rail Relay Mounting Socket

Suits relay types SY-4052 and SY-4053



7.5

7.5

7	Cat.	Qty 1+	Qty 10+	Qty 25+
	SY-4063	\$4.95	\$4.45	\$3.90

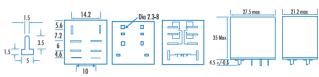
CRADLE RELAYS

Cradle Relay - DPDT

DIN mount cradle relays. Available in 12V or 24DC configuration.

Base to suit: SY-4064. SY-4007 DPDT Relay 24VDC 10A, Rated coil voltage: 24VDC, Coil current: 58mA Contact rating: 10A (resistive load), Contact resistance: 50 milliohms

Contact resistance: 50 millioninis
Operate time: 25ms max,
Must operate voltage: 19.2VDC
Operational life: 20 million cycles,
Coil resistance: 650Ω (SY-4007), 160Ω (SY-4008)



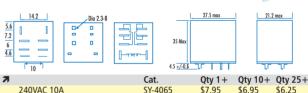
7	Cat.	Qty 1+	Qty 10+	Qty 25+
12VDC 10A	SY-4008	\$7.95	\$6.95	\$6.25
24VDC 10A	SY-4007	\$7.95	\$6.95	\$6.25

Cradle Relay - DPDT

For heavy current switching for mains appliances eg. high power speakers.

• Contact rated at 10A 240VAC.

- NO/NC contacts.
- DPDT contacts.
- Suitable base: Use SY-4064 cradle
 Dimensions: 27(W) x 20(D) x 35(H)mm.



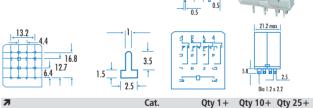
28 max

Cradle Relay - 4PDT

• Rated Voltage: 12VDC Coil Resistance: 180Ω

12VDC 5A

- Contact Rating: 5A NO/NC contacts
 27(W) x 21(D) x 35(H) excl pins.



SY-4009

35 m

DIN Rail Mount Relay Socket

DIN rail mounting base for SY-4009. Also has 4mm holes so can be screw mounted to a chassis.

• Dimensions: 71(L) x 29(W) x 30(H)mm



\$9.95

\$7.75

\$8.75

7	Cat.	Qty 1+	Qty 10+	Qty 25+
	SY-4004	\$5.50	\$4.90	\$4.30

Cradle Relay Base

Quality DIN rail mount with screw terminals.

- Suits SY-4065 Dimensions: 72(W) x 29(D) x 30(H)mm.

7	Cat.	Qty 1+	Qty 10+ Qty 25+
	SY-4064	\$4.50	\$3.95 \$3.60



PANEL/CHASSIS MOUNT RELAYS

All feature rugged construction and quick connect terminals for easy installation.

24VDC OR 240VAC, DPDT, 30A

Two models available. One with a nominal 240VAC coil and one with 24VDC coil.

- Contact Form: DPDT
- Contact Rating: 30A
- 24V Model Coil Resistance: 350 ohm

240V Model Coil Resistance: 3800 ohm@50Hz			T		37.72	
7	Voltage	Current	Cat.	Qty 1+	Qty 10+	Qty 25+
	24VDC	30A	SY-4041	\$14.95	\$13.35	\$11.70
	240VAC	30A	SY-4044	\$16.95	\$14.95	\$13.35

o

37.72

68.58

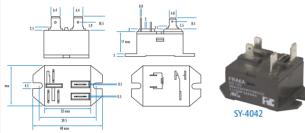
12VDC, SPST, 20 OR 30A

- Contact Voltage (nom): 12VDC
 QC tab termination 4.8mm coil, 6.4mm contacts

20A MODEL - SY-4042

Used in motors, transformers, heaters, etc.

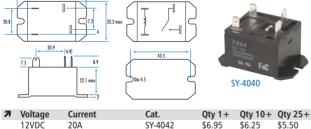
- Coil: 12V, 160 ohm Contact rating: 20A @ 220VAC/30VDC



30A MODEL - SY-4040

Used in heavy duty applications like air conditioning, heating etc.

- Coil: 12V, 120 ohmLoads up to 7,500W,
- High inrush capability: 65A, 10,000V



7	Voltage	Current	Cat.	Qty 1+	Qty 10+	Qty 25+
	12VDC	20A	SY-4042	\$6.95	\$6.25	\$5.50
	12VDC	30A	SY-4040	\$7.95	\$6.95	\$6.25

AUTOMOTIVE RELAYS

Micro 30A Horn Relays

Extremely compact with a footprint of only 22 x 15mm, but maintaining high contact currents for automotive applications. Ideal for air horns, fog lamps or driving light installations. 30A rating on NO contacts, 20A on NC for both 12V and 24V types.

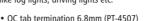


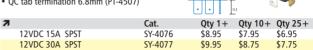
NOT JUST FOR HORNS OF COURSE

7	Cat.	Qty 1+	Qty 10+	Qty 25+
12VDC 30A SPST	SY-4045	\$6.50	\$5.75	\$4.95
12VDC 30A SPDT	SY-4046	\$6.50	\$5.75	\$4.95
24VDC 30A SPDT	SY-4047	\$6.50	\$5.75	\$4.95

Automotive Fused Relays - 15/30A

Designed for automotive applications, these quality relays have an integrated blade fuse (fuse included) and metal mounting bracket. SY-4076 - 15A, ideal for aftermarket horns etc. SY-4077 - 30A, suits high current accessories like fog lights, driving lights etc.





Automotive Horn Relay - 30A

Whilst designed for auto horns, this relay is ideal for any high current application. i.e. alarms, ignition cutout, transmitters, car spotlights etc. Contact voltage (nom) 12VDC. Nominal coil voltage 12VDC. QC tab termination

> Also see our PCB mount version Cat. SY-4072 shown on previous page



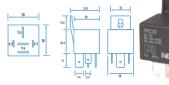
30A SPDT shown



7	Cat.	Qty 1+	Qty 10+	Qty 25+
12VDC 30A-SPST	SY-4068	\$5.95	\$5.25	\$4.75
12VDC 30A-SPDT	SY-4070	\$5.95	\$5.25	\$4.75

Automotive Horn Relay - 60A SPDT

- Contact voltage (nom) 12VDCNominal coil voltage 12VDC.
- QC tab termination SPDT
- Heavy duty quick connectors required for 60A terminals use PT-4717 Pkt. 4



\$14.95

71	Cat.	Qty 1+	Qty 10+	Qty 25+
12VDC 60A Relay	SY-4074	\$8.95	\$7.95	\$6.95

Automotive Relay - 150A SPDT

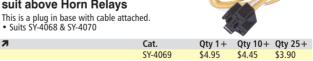
150A contacts for ultra high power applications such as multiple lights, high power audio etc, in a small package.

- Contacts: SPDT
- Contact resistance: 30m ohm max
- Contact rating: 150ACoil voltage: 12VDC
- Coil resistance: 50 ohms Rated coil current: 240mA
- Operate time: 10ms
- Release time: 5ms
- Operational life: 100,000 cycles

7		Ca
	13VDC 340m A	C

	Cat.
12VDC 240mA	SY-4073

Automotive Relay Base to suit above Horn Relays



Interlocking Relay Socket with Leads

The easy and neat way to add multiple relays to your electrical system. These relay bases interlock together, can be panel mounted and take standard 5 pin automotive relays. They also come with integral flying leads as well as bare crimp terminals for customised termination.

Leads 150mm long



7





Qty 10+ Qty 25+

\$11.70

\$13.35

7	Cat.	Qty 1+	Qty 10+	Qty 25+
	SY-4078	\$8.50	\$7.50	\$6.75

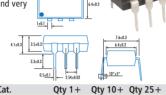
SOLID STATE RELAYS

Solid state relays are particularly useful when only low switching currents are available, such as those presented by CMOS or TTL circuits. Optically isolated for optimum safety, the relays feature high surge ratings to allow lamp and motor switching plus zero voltage turn-on and zero current turn off to minimise EMI and RFI emissions. Use this relay in conjunction with our remote control switches for safe 240V AC mains switching.

PCB Mount Solid State DIL Relay

Able to be triggered from low currents, and a super small package. Low on resistance and very low quiescent current.

Specifications	
Must release current	0.4mA
Must operate current	5mA
Maximum load voltage	60VDC
Maximum load current	150mA
Package	6 pin DIL



PCB Mount Solid State Relays, Low Current

Low profile PCB mounting solid state relays with LED input status indication. Suitable for applications such as I/O interfaces and programmable logic controllers. Four types available:

SY-4090

SY-4092: 5VDC, DC POWER

Specifications	
Control voltage range	4 - 6VDC
Max. input current	20mA
Load voltage	3 - 52.8VDC
Load current	0.01 - 2A

SY-4093: 12VDC, DC POWER

\$8.95

Specifications				
Control voltage range	9.6 - 14.4VDC			
Max. input current	20mA			
Load voltage	3 - 125VDC			
Load current	0.01 - 2A			

\$7.95

\$6.95

Will only switch off if DC power interrupted Will only switch off if DC power interrupted

SY-4096: 12VDC ZERO CROSSING TURN ON AC OPERATION
Type: Zero crossing turn on, solid state relay. The relay will only turn on when the line (output) voltage is near zero. Suitable for resistive loads.

Specifications	
Control voltage range	9.6 - 14.4VDC
Load voltage	75 - 400VAC
Load current	0.1 - 3A

SY-4096 & SY-4097 will switch off if control voltage is removed when AC power source crosses through zero

SY-4097: 12VDC RANDOM TURN ON

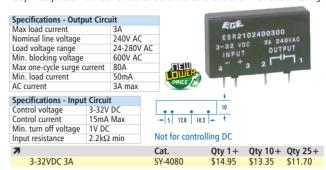
Type: Random turn on, solid state relay. When the control voltage is given the relay output will turn on regardless of what the line voltage is. Suitable for inductive loads.



7	Voltage	Current	Cat.	Qty 1+	Qty 10+	Qty 25+
	5VDC	2A	SY-4092	\$7.95	\$6.95	\$6.25
	12VDC	2A	SY-4093	\$7.95	\$6.95	\$6.25
	12VDC	3A	SY-4096	\$8.95	\$7.95	\$6.95
	12VDC	3A	SY-4097	\$8.95	\$7.95	\$6.95

SY-4080: Mains Type

Solid state relays are particularly useful when only low switching currents are available, such as those presented by CMOS or TTL circuits. Optically isolated for optimum safety, the relays feature high surge ratings to allow lamp and motor switching plus zero voltage turn-on and zero current turn off to minimise EMI and RFI emissions. Use this relay in conjunction with our remote control switches for safe 240V AC mains switching.

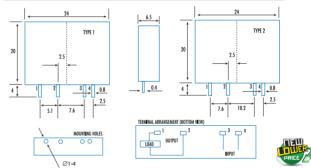


Slim 5V, 12V

- Ultra slim
- 2A switching
- Photo isolation

•	600V blocking	voltag
•	Sealed type	

Specifications	5VDC (SY-4088)	12VDC (SY-4089)
Dielectric strength	20000VAC (1 minute)	20000VAC (1 minute)
Insulation Resistance	100MΩ (at 500VDC)	100MΩ (at 500VDC)
Operating temperature	-30°C to +80°C	-30°C to +80°C
Input Ratings		
Control Voltage	4-6 VDC	9.6 - 14.4 VDC
Maximum Current	15mA	15mA
Voltage On	4V	4V
Current Off	1V	1V
Output Ratings		
Voltage (AC Power)	50 - 250VAC	50 - 250VAC
Maximum Current	2A	2A
Surge Current	30A	30A



7	Voltage	Current	Cat.	Qty 1+	Qty 10+	Qty 25+
	5VDC	2A	SY-4088	\$6.95	\$6.25	\$5.50
	12VDC	2A	SY-4089	\$6.95	\$6.25	\$5.50

Chassis Mount Solid State Relays, High Current

Both look similar but are in fact quite different

Y-4084 40A, 240VAC TRIAC TYPE

This unit has a dielectrically isolated D.C. control input that controls a 40amp TRIAC. This means that you can control AC mains up to 40A RMS. It also means that it will not control D.C.. For that you need the SY-4086 at right.

Specifications for SY-4084

- Dielectric isolation rating 4000VAC
 Opto isolated control, 4V min, 32V max (D.C.)
- Built-in snubber
 TRIAC controlled AC out. 48-280VAC.

· RoHS compliant.

HEATSINK TO SUIT SY4084/SY4086

Using this heat sink with the SY-4084/SY-4086 solid state relays assures you reach the full current capacity. Solid state relays become quite hot when used in a high current application, so suitable heat sinking is essential Datasheet available on our website



Dimensions - 118(W) x 110(L) x 64(H)mm



Baa.	Max
	Max
	Max
10 10	Max :
A 40	

SY-4086 100A, 0-30VDC MOSFET TYPE

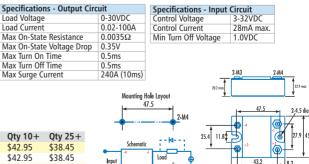
Specifications - Output Circuit

Load Voltage

This unit has a dielectrically isolated D.C. control input to switch a MOSFET which can control loads of up to 100A @ 30VDC. It will not switch AC. To switch AC use the SY-4084. NR: Mechanical details same for both units

Advantages of SY-4086. Switching high current D.C. was previously accomplished by high current contactors. Contactors, however, wear out quickly as they are plaqued by arcing of the actual contacts. There is no arcing with MOSFETS and their very low ON-resistance (in this case 3.5 milli Ω) ensures little wasted energy.

0-30VDC



3-32VD0

BUZZERS

PC Mount Mini PC Piezo

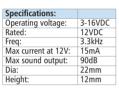
Ideal when you need to fit an alarm in a small place. It has its own built-in drive circuit. It offers low current consumption and it's sealed for DIP soldering & washing



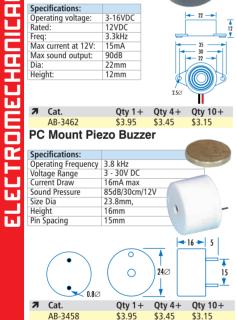
		7.6	12	0.60	
				5.5	
7	7	Cat.	Qty 1+	Qty 4+	Qty 10
		AB-3459	\$4.95	\$4.45	\$3.90

Piezo Buzzer - Mini

It offers medium to loud sound output, low current consumption and is extremely durable. Supplied with fly leads.



			2.5∅	
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AB-3462	\$3.95	\$3.45	\$3.15



Dual Sound Piezo Industrial Type

Similar to SONALERT® earpiercing sound. Non inductive, operates from 1 - 13V DC. Now with both continuous tone and pulsed tone. Red & black for continuous, yellow and black for pulse tone. Ideal for almost all signalling applications.

Specifications: Operating voltage: 1 - 13VDC Rated voltage 12VDC single tone 35mA pulse tone 20mA Frequency . 2 9kHz 105dB/30cm single SPL: 100dB/ 30cm pulse Pulse Rate: - 7 nulse/sec 45(dia)mm x 26(H)mm Mounting 1 x 3mm screw

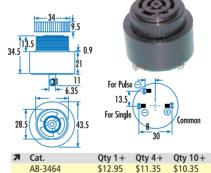


Piezo Reversing Alarm **Automotive Type**

Available with both continuous and pulse tone. These are a heavy duty panel mounted piezo. They are very rigidly made and terminals are via screw down or 6.35mm quick disconnect.

Similar to SONALERT®

Specifications:	
Operating voltage:	4 - 16V
Rated voltage:	12V
Max Current @ 12V:	25 single, 20 pulse mA
Frequency:	2.9kHz
SPL @ 12V:	95 single, 90 pulse dB
Pulse Rate @ 12V:	0.8 - 1.2 pulse/sec
Dimensions:	43.5(dia) x 34.5 (H)mm
Mounting Hole:	29mm



Low Profile Piezo Transducer

This electro-acoustic transducer contains no electronics but will transform AC voltages to sound pressure waves. It will also generate an AC voltage across its terminals when stimulated with a sound pressure wave.

Specifications:			
Dimensions:	30mm diam	neter	
Height:	5mm		
Max. Input voltage:	30V pp		
SPL:	105dB/30cm		
Resonant frequency:	4,200 +/-5		
Resonant Resistance:	300 ohm m		
Electrostatic Capacitance:	20,000pf +	/-30%.	
330 340	-		Topast 1
4.5			
	Qty 1+ Q	ty 4+	Qty 10+

Weatherproof Buzzer 6-14VDC

Designed to withstand exposure to rain when mounted outdoors



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AB-3466	\$16.95	\$14.95	\$13.35

Surface Mount Buzzer

This handy little solid state buzzer operates between 5-15VDC. Used in many applications

- Current consumption 40mA max Sound level: 79dB/1mt.
- 31(W) x 17(D) x 15(H)mm
- Note: This is an electromechanical buzzer





Cat.	Qty 1
AB-3452	\$3.95

Qty 1+	Qty 4+	Qty 10+	
\$3.95	\$3.45	\$3.15	

DECIBELS

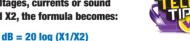
Contrary to much popular usage, the decibel (dB) is not actually a unit of any particular quantity, but rather an expression of the ratio between two quantities, such as, power, voltage, current, acoustic pressure.

Many sensors, including our own ears, respond to stimuli in a logarithmic fashion, that is, an increase of 10dB Results in a doubling of loudness. This allows a huge range of intensities. As the dB compares the logarithmic quantities, it agrees with our perceptive comparisons.

To calculate the ratio, in dB, of two power levels, P1 and P2, the formula is:

 $dB = 10 \log (P1/P2)$

If the quantities are voltages, currents or sound pressure levels, X1 and X2, the formula becomes:



If the quantities X1 and X2 are both measured in the same impedances, their dB ratio will be numerically equal to the dB ratio of their equivalent powers. If their impedances Z1 and Z2

are unequal, the dB ratio of their power can be found from: $dB = 20 \log (X1/X2) + 10 \log (Z2/Z1)$

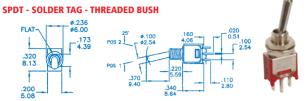
Negative dB ratios will result when P1 (or X1) is less than P2 (or X2), while positive values indicate that P1 (or X1) is greater than P2 (or X2).





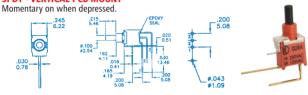
General Specifications:	Sub Miniature	Miniature
Electrical life (make - and - break cycles at full load)	30,000	40,000
Contact resistance (@2 - 4VDC @ 100mA)	20ΜΩ	10ΜΩ
Insulation resistance (any contact to body)	1,000ΜΩ	1,000ΜΩ
Dielectric strength (@ sea level)	1,000VRMS	1,000VRMS
Contact rating (with resistive load)	1A @ 250VAC	2A @ 250VAC
Contact rating (with resistive load)	3A @ 28VDC	5A @ 28VDC

Sub-Miniature

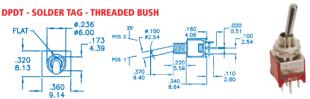


Brackets indicate switch position Qty 10+ Qty 25+ SPDT (on - on) ST-0300 \$2.95 \$2.60

SPDT - VERTICAL PCB MOUNT

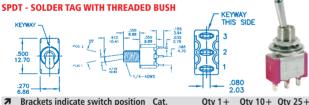


Qty 10+ Qty 25+ Brackets indicate switch position Cat. Qty 1+ SP-0380 \$3.45 SPDT (on-mom) \$3.95 \$3.15



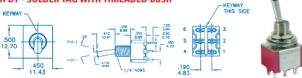
Brackets indicate switch position Cat. Qty 10+ Qty 25+ DPDT (on - on) ST-0310 \$2.95 \$2.60

Miniature



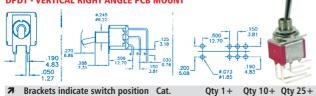
Brackets indicate switch position Cat. Qty 10+ Qty 25+ SPDT (on - on) ST-0335 \$2 95 \$2.60 \$2.30 SPDT Centre Off (on-off-on) \$3.45 ST-0336 \$3.05 \$2.75

DPDT - SOLDER TAG WITH THREADED BUSH



7	Brackets indicate switch position	Cat.	Qty 1+	Qty 10+	Qty 25+
	DPDT (on - on)	ST-0355	\$3.75	\$3.30	\$2.95
	DPDT Centre Off (on - off - on)	ST-0356	\$4.50	\$3.95	\$3.60
	DPDT Mom Centre Off (mom-off-mom)	ST-0358	\$4.95	\$4.45	\$3.90
	DPDT Mom (on - mom)	ST-0357	\$4.50	\$3.95	\$3.60

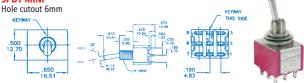
DPDT - VERTICAL RIGHT ANGLE PCB MOUNT



ST-0365

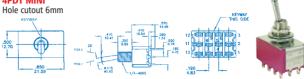
Miniature (continued)

3PDT MINI



Brackets indicate switch position Cat. Qty 1+ Qty 10+ Qty 25+ ST-0505 3PDT (on - on) \$7.95 \$6.95

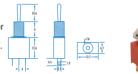
4PDT MINI



Brackets indicate switch position Cat. Qty 1+ Qty 10+ Qty 25+ 4PDT (on - on) ST-0506 \$8.95 \$7.95 \$6.95

Sealed

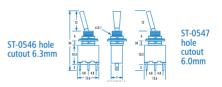
Miniature Ideal for use in wet or moist areas. Rated at 2A, 250VAC. Splash post IP54





7	Brackets indicate switch position	Cat.	Qty 1+	Qty 10+	Qty 25+
	SPDT (on - on)	ST-0554	\$6.95	\$6.25	\$5.50
	DPDT (on - on)	ST-0555	\$7.95	\$6.95	\$6.25

Miniature Flattened Actuator



7	Brackets indicate switch position	Cat.	Qty 1+	Qty 10+	Qty 25+
	SPDT (on - on)	ST-0546	\$5.50	\$4.90	\$4.30
	DPDT (on - on)	ST-0547	\$5.95	\$5.25	\$4.75

Rubber Boot with Seal to **Suit Mini Toggles**

This waterproof hood replaces the standard mounting nut and has an integrated 'O' ring to seal your equipment from outside moisture.

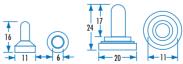
Suits our mini toggle switches.

True waterproof seal



Qty 1+ Qty 10+ Qty 25+ ST-0594 \$1.85 \$1.65

Splashproof Hoods For Toggle Switches





These hoods simply screw over the toggle switch to deter ingress of water.

MINIATURE - INCLUDES NUTS FOR BOTH MINI & ULTRA-MINI TOGGLE SWITCHES.

7	Cat. ST-0590	Qty 1+ \$1.85	Qty 10+ Qty 25+ \$1.65 \$1.45				
STANDARD (LARGE)	STANDARD (LARGE)						
7	Cat.	Qty 1+	Qty 10+ Qty 25+				
	ST-0592	\$2.85	\$2.53 \$2.23				

DPDT Threaded Bush (on - on)

\$4.45

Switches - Toggle

TOGGLE SWITCHES (CONTINUED)

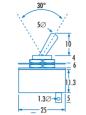
Standard Panel Mount Toggle Switches

Body size 26 x 14mm, clearance 20.5mm,

- Mounting hole 12mm
- Rated 2A 250V • Solder terminals







Brackets indicate switch position Cat 250VAC 2A (on - off)

Qty 1+ ST-0570 \$2.65 \$2.30

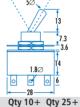
HOLE

Qty 10+ Qty 25+ \$2.07

DPDT

- Body size 29.5 x 18mm
- Clearance 23mm
 Mounting hole 12mm
- Rated 3A 250V
- Solder terminals





Brackets indicate switch position 250VAC 3A (on - on)

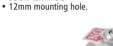
ST-0572

Qty 1+ \$2.95 \$2.60

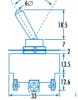
DPDT - FXTRA HEAVY DUTY

Rated at 10A 250VAC, this switch will handle mains power switching

Screw terminals







\$4.95



ST-0575

Qty 10+ Qty 25+ \$4.45

CUTOUT

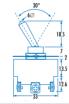
120

DPDT - HEAVY DUTY CENTRE OFF

Huge 10A 125V rating, chrome toggle with on/off indicator plate.

- DPDT centre off. Body size 35 x 20mm, clearance 26mm, mounting hole 12mm.
 Screw terminals. Same physical size as ST-0575 above.







Brackets indicate switch position Cat. 125VAC 10A(on - off - on)

Otv 1+ ST-0576 \$4.95

16

11

Qty 10+ Qty 25+ \$4.45

13

Qty 25+

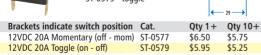
\$4.95

\$4.75

Ideal for any high current 12VDC switching application. Our ST-0578 Missile Switch Cover is perfectly suited to this switch.



- Body size 29.5 x 17mm
- Mounting hole 12mm
 Rated 20A 12V DC
- ST-0577 momentary
- ST-0579 toggle

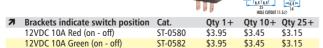


12V Illuminated Duckbill Actuator

Actuator illuminates when switch is on.

Two colours available Rated at 12VDC 10A SPST.

• QC tab termination 6.8mm (PT-4507)



C&K Toggle Mini Toggle Switches

Quality US C&K toggle switches with solder tags.

Cat ST-0398



SPDT - 7101

On-onSolder

Cat ST-0396











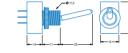


7				Cat.	Qty 1+	Qty 10+	Qty 25+
	250V	2A	SPDT	ST-0396	\$6.45	\$5.75	\$4.95
	250V	2A	SPDT Centre Off	ST-0397	\$6.95	\$6.25	\$5.50
	250V	2A	DPDT	ST-0398	\$8.95	\$7.95	\$6.95
	250V	2A	DPDT Centre Off	ST-0399	\$9.45	\$8.50	\$7.50

SPST Illuminated

Illuminated by an LED in the toggle for easy identification.

- SPST
- · Illuminated red
- Rated for 12VDC 20A
- · Mounting hole 11.5mm





1				Cat.	Qty 1+	Qty 10+	Qty 25+
	12VDC	20A	SPST	ST-0587	\$4.95	\$4.45	\$3.90

Heavy Duty Toggle

 Mounting hole 11.5mm







1				Cat.	Qty 1+	Qty 10+	Qty 25+
	277VAC	20A	SPST	ST-0581	\$4.95	\$4.45	\$3.90
	277VAC	20A	SPDT	ST-0583	\$5.45	\$4.90	\$4.30
	277VAC	16A	DPDT	ST-0585	\$7.95	\$6.95	\$6.25
	277VAC	16A	DPDT - Centre Off	ST-0586	\$7.95	\$6.95	\$6.25

Toggle Switch Bargain Bag - 20 Pack

A bargain bag of surplus switches, containing 20 various mini and micro toggle switches.

Switch contents wil vary







24V 15A SPST Sealed Toggle This large toggle switch is specially designed for marine conditions. A weatherproof rubber boot covers the actuator, and the switch mechanism is encapsulated in rubber. For this reason, 150mm fly leads are attached instead of the usual terminals. Not only limite

to marine use, it can also be used as an ultradurable switch in many applications.

• Ideal for marine or automotive use.

• Max volt rating: 24V @ 15 amps 24VDC 15A SPST ST-0574

d 3813	36	185	
	Qty 1+	Qty 10+	
574	\$12.95	\$11.35	\$10.35

Missile Switch Protective Cover

Military style missle switch cover featuring a heavy duty hinged, spring return protective cover. Covers turn switch off when snapped down. Fit any toggle switch with a 12mm mounting hole and appropriate length actuator.

SWITCH (Cat. ST-0579) SHOWN MOUNTED IN MISSILE COVER (switch not included).

> WHEN COVER IS DOWN, ACTUATOR CANNOT MOVE



		,			
7		Cat.	Qty 1+	Qty 10+	Qty 25+
	Red	ST-0578	\$6.95	\$6.25	\$5.50
	Carbon Fibre Style	ST-0584	\$6.95	\$6.25	\$5.50

12Ø

2.5

7.4

4

5.5

Switches - Tactile

TACTILE SWITCHES

SPST Micro

Rating:	12VDC 50mA
Operating Temp	-20~70°C
Contact Resistance	100mΩ Max.
Insulation Resistance	100MΩ Min. at 100VDC
Withstand Voltage	250VAC for 1 minute
Contact Arrangement	SPST N.O.
Action	Momentary

VERTICAL MOUNT

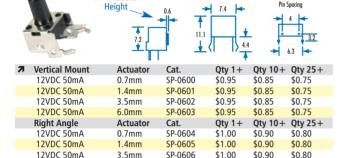


"A" - Actuator





RIGHT-ANGLE VERSION



SP-0607

12VDC 50mA **SPST PCB Mount**

Specifications	
Rating	12VDC 50mA
Operating Temperature	20~70°C
Contact Resistance	100mΩ Max.
Insulation Resistance	100MΩ Min. at 100VDC

250VAC for Withstand Voltage: 1 minute Contact Arrangement: SPST N.O. Momentary action

\$0.90

\$0.80

\$1.00

11.9



6.0mm



			← 11.9	11.9 -		
7			Cat.	Qty 1+	Qty 10+	Qty 25+
	12VDC 50mA	Square	SP-0608	\$1.25	\$1.10	\$0.97
	12VDC 50mA	Round	SP-0609	\$1.25	\$1.10	\$0.97

SPST PCB - 2 Pin

12VDC 50mA
-16∼60°C
100mΩ Max.
100MΩ
250VAC for 1 minute
2 pin SPST N.O
Momentary
6 x 3.5 x 3.5mm



7			Cat. Qty 1-		 Qty 10+ Qty 2 		
		12VDC 50mA	PCB Mount	SP-0611	\$0.95	\$0.85	\$0.75

SPST SMD

This switch is similar to SP-0600 but surface mount. Through hole tactile switch. Packet of 10



SPST PCB Mount Snap Action - Round



PCB Mount, single pole, momentary. Suitable for keyboards, security systems, etc. Available in 5 colours.

- These switches are normally open SPST. When button is depressed the switch closes, but only while the button is down.

 Contact rating 10mA/35V DC. Pin spacing 5mm

	_	•	-			
4	7		Cat.	Qty 1+	Qty 10+	Qty 25+
	35VDC 10mA	Red	SP-0720	\$1.45	\$1.30	\$1.15
	35VDC 10mA	Black	SP-0721	\$1.45	\$1.30	\$1.15
	35VDC 10mA	Yellow	SP-0722	\$1.45	\$1.30	\$1.15
	35VDC 10mA	White	SP-0723	\$1.45	\$1.30	\$1.15
	35VDC 10mA	Green	SP-0724	\$1.45	\$1.30	\$1.15

SPST PCB Mount with LED

Vertical

Metallic look		A AL
Specifications		
Rating	12VDC 50mA	
Operating Temperature	-50 ∼ 70° C	
Contact Resistance	100mΩ Max.	
Insulation Resistance	100MΩ min at 100VDC	16.
Withstand Voltage	250VAC for 1 minute	
Contact Arrangement	SPST N.O.	
Action	Momentary	
LED Power Supply	3.5-4V DC @ 25mA	

	7	Vertical		Cat	Qty 1+	Qty 10+	Qty 25+
		12VDC 50mA	Red	SP-0612	\$4.45	\$3.95	\$3.45
		12VDC 50mA	Green	SP-0613	\$4.45	\$3.95	\$3.45
		12VDC 50mA	Blue	SP-0614	\$4.45	\$3.95	\$3.45

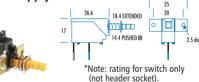
SPST PCB Mount - Vertical with LED

Specifications		
Rating	12VDC 50mA	
Operating Temperature	-50 ∼ 70° C	
Contact Resistance	100mΩ Max.	
Insulation Resistance	100MΩ min at 100VDC	Section 1
Withstand Voltage	250VAC for 1 minute	
Contact Arrangement	SPST N.O.	
Action	Momentary	
LED Power Supply	3.5-4V DC @ 25mA	

7		Cat.	Qty 1+	Qty 10+	Qty 25+
12VDC 50mA	Red	SP-0620	\$3.95	\$3.45	\$3.15
12VDC 50mA	Green	SP-0621	\$3.95	\$3.45	\$3.15
12VDC 50mA	Blue	SP-0622	\$3.95	\$3.45	\$3.15

ATX Computer Power Supply Switch

Replacement Power Switch. 250VAC 10A* Complete with connecting cable & 2 pin plug.



7	Cat.	Qty 1+	Qty 10+	Qty 25+
250VAC 10A	SP-0748	\$14.95	\$13.35	\$11.70

BELL PUSHBUTTONS

Illuminated Bell Pushbutton

This door bell button has a small globe mounted behind which illuminates the pushbutton and an area where you can place your name or street number. Supplied with 12V globe, which also works on lower voltage.

- Contact Arrangement SPST N.O.Globe in parallel with contacts

7		Cat.	Qty 1+	Qty 10+	Qty 25+
	Pushbutton	SP-0782	\$7.95	\$6.95	\$6.25
	Spare Globe	SL-2720	\$1.95	\$1.75	\$1.55

Bell Pushbutton

Ideal replacement for doorbells.

- Contact Arrangement SPST N.O.
 Size 60(L) x 32(W) x 12(D)mm
- · Biege in colour

7	Cat.	Qty 1+	Qty 10+	Qty 25+
	SP-0780	\$4.95	\$4.45	\$3.90



MOMENTARY SWITCHES

SPST - Miniature

125VAC 1 amp rating. Momentary action.





7		Cat.	Qty 1+	Qty 10+	Qty 25+
	125VAC 1A Red	SP-0710	\$1.65	\$1.45	\$1.30
	125VAC 1A Black	SP-0711	\$1.65	\$1.45	\$1.30

SPST

SPST momentary push on switch Rated @ 1.5A 250VAC. Actuator diameter 10mm

- Cutout 7mm.
- Will panel mount on 1/2" centres





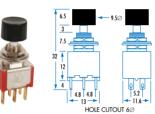
7			
	250VA	C 1	5A

7	Cat.	Qty 1+	Qty 10+	Qty 25
250VAC 1.5A	SP-0702	\$3.95	\$3.45	\$3.15

DPDT

- Rated 3A 125VAC
- 6mm mounting hole Momentary Action DPDT
- Black Actuator.
 The quality of the switch can be felt when actuated.





7		Cat.	Qty 1+	Qty 10+	Qty 25+
	125VAC 3A	SP-0714	\$7.95	\$6.95	\$6.25

Push Button Switch Caps

Black caps which press fit over Push Button switches with a shaft diameter of 2.54mm (0.1inch). OD: 5mm, Height: 5mm









SPST Panel Mount

Very attractive small round momentary push on switch, with black body and black actuator, rated @ 1.5A 250VAC.

- Contact Arrangement SPST N.O.

Cutout is 12.5mm.Solid construction			- 3.7	5,5 - 3,7 -	
7	Cat.	Qty 1+	Qty 10+	Qty 25+	
250VAC 1.5A	SP-0700	\$3.95	\$3.45	\$3.15	

Large Waterproof Pushbutton Switch

Plastic housing with brass 5A DC contacts. Rubber cap over housing renders assembly virtually waterproof.

- Requires 22mm
- mounting hole. Screw terminals.
- · Ideal for horn button, starter motor activation, etc.
- Contact Arrangement SPST N.O.







SP-0755

Latching Emergency Stop Switch

Essential for installations of industrial or lab equipment. Latching actuator with rotating release and normally closed contacts. When the actuator is pushed in, the normally closed contacts open and the switch is latched, ensuring the equipment can't be operated until the switch is intentionally disengaged by rotating the actuator and releasing. It has two independent sets of contacts; normally open and normally closed.

Specifications	
Configuration	2 contact sets, normally closed (RED) & normally open (GREEN)
Actuation	Push off, rotate on
Contact rating	125VAC 6A, 300VAC 3A
Mounting hole	22mm



7	Cat.	Qty 1+	Qty 10+	Qty 25+
125VAC 6A	SP-0786	\$9.95	\$8.75	\$7.75

3PDT Heavy Duty Foot Switch

Being 3 pole means you can wire your stompbox projects to be true bypass. It also has a low profile body so it can be accommodated in shallow enclosures and it has a solid, positive click on/off action. Heavy duty for the rough and tumble world of rock n' roll.

- Push on push off250VAC 2A rated.
- · Hole size: 12mm

7



7	Cat.	Qty 1+	Qty 10+	Qty 25+
250VAC 2A	SP-0766	\$11.95	\$10.70	\$9.50

DPDT Heavy Duty Foot Switch

The alternative action switch (push on, push off).

Contact rating with resistive load 2A@250VAC. Contact resistance $< 0.08\Omega$.



HOLE CUTOUT Ø 11.58

7	Cat.	Qty 1	+ Qty 10+	Qty 25+
250VAC 2A	SP-07	64 \$7.95	\$6.95	\$6.25

Foot Switch

This foot switch is momentary action and can This root switch is momentary action and can be wired to be either push-on or push-off. The switch is rated at 250V 10 amp. The switch has a positive switch feel and an audible "click" when pressed. Could be used in PA applications, dictaphones etc.

- Switch size 80(W) x 80(L) x 30(D)mm. Colour is grey, cable is 850mm long.

7		Cat.	Qty 1+	Qty 10+	Qty 25+
	250VAC 10A	SP-0760	\$24.95	\$22.35	\$19.70

Sorry! we've tried to find a DPST version of this switch but it just does not seem to be available.

Bedlamp Switch

- Panel hole 10mm.
- 240VAC 2A rating. Cutout 16(dia.)mm
- Single pole single throw



240VAC 2A SPST SP-0736 \$1.75

125VAC 8A

\$5.95

\$5.25

\$4.75

PUSHBUTTON SWITCHES

SPST Square



Cat. SP-0716 Push-on Momentary SPST Red Actuator Cat. SP-0718 Push-on/Push off SPST Black Actuator (Latching) Cat. SP-0717 Push-Off (N/C) SPST Momentary - Red Actuator

7		Cat.	Qty 1+	Qty 10+	Qty 25+
	250VAC 3A Momentary	SP-0716	\$1.95	\$1.75	\$1.55
	250VAC 3A Push on Push off	SP-0718	\$1.95	\$1.75	\$1.55
	250VAC 3A Momentary (NC)	SP-0717	\$1.95	\$1.75	\$1.55

DPDT Illuminated - IP65

- Available in momentary or on/off action
- Rated for 250VAC 5A
 12VDC LED illumination
- Mounting hole 15mm
- IP65 rated
- Contact arrangement DPDT N.O./N.C



15.50

₹ Rating	Colour	Action	Cat.	Qty 1+	Qty 10+	Qty 25+
250VAC 5A	Green	Momentary	SP-0741	\$9.95	\$8.75	\$7.75
250VAC 5A	Green	Push On Push Off	SP-0745	\$12.95	\$11.35	\$10.35
250VAC 5A	Red	Momentary	SP-0747	\$9.95	\$8.75	\$7.75
250VAC 5A	Red	Push On Push Off	SP-0749	\$12.95	\$11.35	\$10.35

SPST LED Illuminated

These short bodied pushbuttons are available in 2 styles. Both have red LEDs behind a red diffused actuator. Rated at 1.5A 250VAC.

LED needs 2VDC @ 20mA.





7		Cat.	Qty 1+	Qty 10+	Qty 25+
	250VAC 1.5A Momentary	SP-0706	\$5.95	\$5.25	\$4.75
	250VAC 1.5A Push On Push Off	SP-0704	\$5.95	\$5.25	\$4.75

Round - IP56

IP56 rated round pushbutton switches.

- QC spade lugs. Push on/push off
- · Mounting hole: 20mm dia



7	Colour	Cat.	Qty 1+	Qty 10+	Qty 25+
DPST 250VAC 6A	Black	SP-0743	\$5.95	\$5.25	\$4.75
SPST 250VAC 1.5A	Red Illuminated	SP-0744	\$6.95	\$6.25	\$5.50

SPST Dome - IP67



7			Colour	Cat.	Qty 1+	Qty 10+	Qty 25+
	50V	100mA	Black	SP-0656	\$4.95	\$4.45	\$3.90
	50V	100mA	Red	SP-0657	\$4.95	\$4.45	\$3.90

SPST Round - IP56

- · Available in momentary
- or on/off action IP56 rated
- Rated for 14V 10A

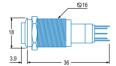


7	7			Cat.	Qty 1+	Qty 10+	Qty 25+
	12V 10A	Black	Momentary	SP-0756	\$6.95	\$6.25	\$5.50
	12V 10A	Red	Momentary Illuminated	SP-0757	\$8.95	\$7.95	\$6.95
	12V 10A	Black	Push On Push Off	SP-0758	\$6.95	\$6.25	\$5.50
	12V 10A	Red	Push On Push Off Illum	SP-0759	\$8.95	\$7.95	\$6.95

DPDT Illuminated - IP67

IP67 rated for industrial use or other harsh environments. Illuminated, DPDT (N.O./N.C.), DPDT, on-off or momentary action. Rated for 250VAC@3A, with 12VDC LED illumination. Mounting hole 16mm.









7	Rating	Colour	Action	Cat.	Qty 1+	Qty 10+	-Qty 25+
	250VAC 3A	Red	on - off	SP-0791	\$14.95	\$13.35	\$11.70
	250VAC 3A	Green	on - off	SP-0792	\$14.95	\$13.35	\$11.70
	250VAC 3A	Blue	on - off	SP-0793	\$14.95	\$13.35	\$11.70
	250VAC 3A	Red	Momentary	SP-0796	\$12.50	\$10.95	\$9.95
	250VAC 3A	Green	Momentary	SP-0797	\$12.50	\$10.95	\$9.95

IGNITION SWITCHES

Engine Start Switch

- Keyless engine start for track or street use
- Illuminated momentary action pushbutton Rated for 12VDC 50A
- Mounting hole 22mmContact arrangement
- SPST N.O.





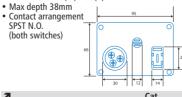
7	Cat.	Qty 1+	Qty 10+	Qty 25-
12VDC 50A	SP-0773	\$19.95	\$17.70	\$15.70

Racing Ignition Switch Panel

Complete ignition switch panel ready to install in your car. Push button engine start, missile launch ignition on and indicator light. Finished in faux carbon fibre to complete the

Dimensions: 95(W) x 66(H)mm

SPST N.O.







7 Cat. Qty 1	+ Qty 10+ Qty 25+
SP-0774 \$39.9	5 \$35.90 \$31.90

Switches - Rocker

ROCKER SWITCHES

SPST - Ultra Mini

- Snap in fitting.SPST 250VAC 6A.Cutout size 6.5(W) x 19(H)mm.
- Black body, black actuator.
- QC tab termination 6.4mm (PT-4607)



Qty 10+ Qty 25+ 250VAC 6A SPST SK-0975

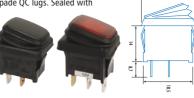
SPST IP56 Rated Mini Rocker Switch

SPST mini rocker switches with spade QC lugs. Sealed with a rubber boot and IP56 rated.

Two types available:
• Black: SK-0968

1

- Red (illuminated): SK-0969
- Cutout: 18.8 x 12.5mm



7			Cat.	Qty 1+	Qty 10+	Qty 25+	
	250VAC 10A	Black	SK-0968	\$5.75	\$4.95	\$4.60	
	12VDC 16A	Red - Illuminated	SK-0969	\$6.75	\$5.95	\$5.25	

SPST - Mini

- Dimensions: 21 x 15mm
- Panel cut out size
 13 x 19.5mm
- QC tab termination SPST 240V 6A







SPDT IP65 Illuminated Centre Off Rocker Switch

IP65 rated, illuminated switch for automotive and marine applications. Illuminates one side red and one side areen.

SPST IP56 Rated Rocker Switches

Waterproof large rocker actuator for harsh environment applications.

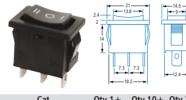
- On-Off-On Rating: 14VDC, 21A
- Cutout size: 34 x 21mm



7			Cat.	Qty 1+	Qty 10+	Qty 25+
	14VDC 21A	SPDT	SK-0999	\$12.95	\$11.35	\$10.35

SPDT - Centre Off

- LatchingVoltage: 250VAC
- Current: 6 Amp



7		Cat.	Qty 1+	Qty 10+	Qty 25+
250VAC 6A	SPDT	SK-0991	\$4.95	\$4.45	\$3.90

• IP56 rated

SPST

- SMALL Rated for 240VAC 10A
- Mounting hole 34 x 15mm Cat SK-0993

LARGE

- Rated for 125VAC 20A
- Mounting hole





7		Cat.	Qty 1+	Qty 10+	Qty 25+
	240VAC 10A	SK-0993	\$4.95	\$4.45	\$3.90
	125VAC 20A	SK-0996	\$12.95	\$11.35	\$10.35

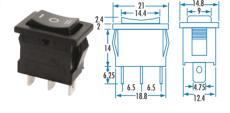
SPDT - Mini - Centre Off

SPRING RETURN BOTH SIDES

ELECTROMECHANICAL

Momentary contacts with spring return to centre on both sides.

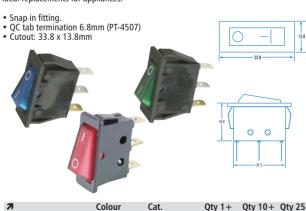
- · Mini QC tab termination 6.4mm (PT-4607)
- Contact arrangement SPDT N.O.



7			Cat.	Qty 1+	Qty 10+	Qty 25+
	250V 6A	SPDT	SK-0987	\$4.95	\$4.45	\$3.90

SPST - Illuminated

Black body with illuminated actuator. Ideal replacements for appliances.



7		Colour	Cat.	Qty 1+	Qty 10+	Qty 25+
	240VAC 15A	Blue	SK-0976	\$3.50	\$3.15	\$2.75
	240VAC 15A	Red	SK-0978	\$3.50	\$3.15	\$2.75
	240VAC 15A	Green	SK-0979	\$3.50	\$3.15	\$2.75

SPST Illuminated IP56 Rated Rocker Switch

IP56 rated, large rocker actuator.

- SPST
- Illuminated red
- Rated for 12VDC 20A
- Mounting hole 20.5 x 37mm

7		Cat.	Qty 1+	Qty 10+	Qty 25+
	12VDC 20A Red Illuminated	SK-0997	\$12.95	\$11.35	\$10.35

Toggle switches, alas, are declining in popularity. Over the next few years we will be regretfully pruning our range down to meet this reality. The first indication you see in this year's catalogue is the offering of the ST-0372 bargain switch pack on page 106.

We seriously suggest that you consider squirelling a pack away for the future...

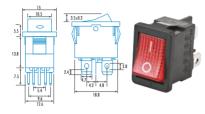
CTROMECHAN

ROCKER SWITCHES (CONTINUED)

DPST - Neon Illuminated - Mini

- 240VAC
- Illuminated actuator
- · Solder terminals
- OC tab termination 6.4mm (PT-4607)





7			Cat.	Qty 1+	Qty 10+	Qty 25+
	240VAC 2A DPST	Red	SK-0995	\$4.95	\$4.45	\$3.90

DPDT - Large - Neon Illuminated

Mains Illuminated. DPDT 240VAC 15 amp.

- Black body, available in red or green illumination.
- Spade lug connections.Cutout 27 x 22mm.
- QC tab termination 6.8mm (PT-4507)



7				Cat.	Qty 1+	Qty 10+	Qty 25+
	240VAC 15A	DPDT	Red	SK-0982	\$4.95	\$4.45	\$3.90
	240VAC 15A	DPDT	Green	SK-0983	\$4.95	\$4.45	\$3.90

SK-0981

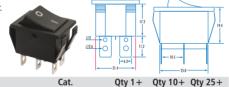
DPDT - Large - Non Illuminated

DPDT switch with black body and black actuator

 OC tab termination 240VAC 16A.

240VAC 16A

• Snap in fitting.



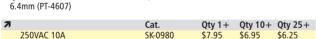
\$3.95

\$3.45

DPDT - Large - Centre/Off

Spring Return Both Sides Momentary contacts with spring returns to centre on both sides. These are commonly used for car power antennas and power windows.





Waterproof Caps for Rocker Switches

Push-on, clear plastic caps to suit rocker switches.

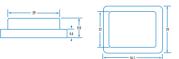
SUITS MINI SWITCHES

Suits switches SK-0984, SK-0985 and SK-0987.



SUITS LARGE ROCKER SWITCHES

Suits switches SK-0980, SK-0981, SK-0982 and SK-0983,



7		Cat.	Qty 1+	Qty 10+ Qty 25+	
	Suits Larger Rocker Switches	SK-0972	\$1.95	\$1.75 \$1.55	
	Suits Mini Rocker Switches	SK-0970	\$1.40	\$1.25 \$1.10	

SPST - Round Actuator

- Snap fits into a 20mm round hole
- 10 amps @ 250VAC
- Black body with black actuator
- QC tab termination 6.4mm (PT-4607)



250VAC 10A SK-0960 \$2.25 \$1.95 \$1.	0	+ Qty 25+
250776 1071 510000 \$2.25 \$1.55 \$1.	250VAC 10A	\$1.80

SPST - Round Actuator

Illuminated Red

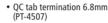
- Snap fits into a 20mm round hole
- 10 amps @ 250VAC
 Black body with red neon actuator
- QC tab termination 6.4mm (PT-4607)

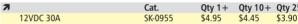


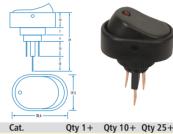
7		Cat.	Qty 1+	Qty 10+	Qty 25+
	250VAC 10A	SK-0962	\$2.95	\$2.60	\$2.30

SPST - Rocker Actuator

LED Illuminated - Red This is a classy switch. It is a rocker, but only needs a round 12mm hole (with 1mm flat). It is SPST and can handle a massive 30 amps at 12VDC. There is an LFD in the actuator which lights from a 9 - 12V source.







SPST - Paddle

LED Illuminated - RED Paddle type actuator with built in red LED

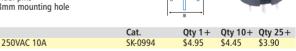
- · Mounts easy in a 20mm hole.
- 10 amps @ 250VAC • LED requires 2V @ 20mA
- Black body
- QC tab termination 6.8mm (PT-4507)
- Solder tabs for LED

7		Cat.	Qty 1+	Qty 10+	Qty 25+
	250VAC 10A	SK-0964	\$4.95	\$4.45	\$3.90

DPDT Round Actuator - Red

This rocker mounts in a round 18mm hole.

- DPDT
- 6 amps @ 250VAC
- Black body, red actuator
- Solder pins18mm mounting hole



DPDT - Round Actuator - IP65

DPDT round rocker switches with mini spade QC lugs. Sealed with a rubber boot and IP65 rated.

• 20mm mounting hole



7	Cat.	Qty 1+	Qty 10 +	- Qty 25+
250VAC 10A Black	SK-0966	\$6.95	\$6.25	\$5.50
250VAC 10A Red - Illuminated	SK-0967	\$7.95	\$6.95	\$6.25

Inline Low Voltage Switch

Simply connect your plug pack adaptor into this handy in-line switch to provide quick and easy on/off control. Much easier than unplugging the connector or reaching for the power point when you want to switch your device on or off. Fitted with 2.1mm DC plug & socket and rated at 24VDC at 2 amps



24VDC 2A

SK-0998

Qty 10+ Qty 25+ \$6.95

Qty 10+ Qty 25+

\$3.90

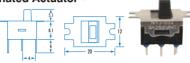
\$4.45

SLIDE SWITCHES

These slide switches have silver plated contacts, contact ratings of $0.3A @ 100V min, 25m\Omega contact resistance, 100M\Omega plus$ insulation resistance (at 500VDC) & endure about 10,000 cycles.

SPDT with LED Illuminated Actuator -**Panel or PCB Mount**

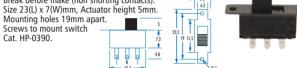
Current rating 3A @ 250VAC LED requires 2 volts. LED colour is red.



\$4.95

250VAC 3A SS-0825

DPDT Panel Mount Sub Miniature Break before make (non shorting contacts). Size 23(L) x 7(W)mm. Actuator height 5mm. Mounting holes 19mm apart.



Cat Qty 10+ Qty 25+ 55-0852 \$1.45 \$1.30

DPDT Panel Mount Sub Miniature

Size 23(L) x 7(W)mm. Actuator height 7mm

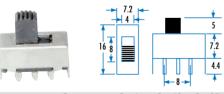


DPDT Panel Mount Miniature 12.5 Size 35(L) x 13(W)mm. Actuator height 6mm. Mounting holes 28mm apart 3mm diameter holes

Cat. Qty 10+ Qty 25+ SS-0821 \$1.25 \$1.10 \$0.97

DPDT PCB Mount Sub Miniature

Size 16(L) x 7.2(W)mm Actuator height 5mm.



Qty 1+ Qty 10+ Qty 25+ SS-0823 \$1.45 \$1.30

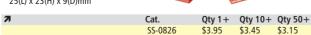
Inline JST Switch Kit

JST switches and connectors provide an unobtrusive solution to power control. They are small so will fit comfortably in the chassis of an RC vehicle. This kit includes a JST switch with a male and female JST connector on each end attached to a 140mm wire. Great for hobby applications such as model trains, remote control helicopters and cars, or simple around the house projects that require discrete and

· Includes mounting bracket and screws

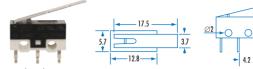
simple switching.

Switch dimensions: 25(L) x 23(H) x 9(D)mm

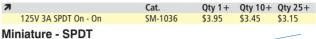


MICROSWITCHES

Subminiature - SPDT

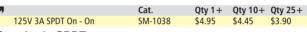


- Actuator length 14mm
- Rated at 125V 3A
- Solder terminals



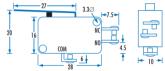


- Actuator length 37.5mm
- Rated at 125V 5A (250V 3A). Solder terminals



Standard - SPDT





240VAC 10A SPDT On - On

Cat. SM-1040

Qty 10+ Qty 25+ \$3.30 \$3.75

Qty 10+ Qty 25+

3.9

3.3

Extended Actuator - SPDT



QC tab termination 6.4mm (PT-4607)

250VAC 5A SPDT On - On

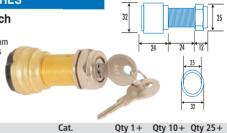
SM-1039 \$3.75 \$3.30 \$2.95 See page 333 for Battery Isolator Switches

MARINE SWITCHES

Marine Keyswitch

SPST heavy duty key switch with 2 keys. 21mm mounting hole in panels up to 25mm thick

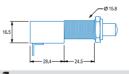
· Screw terminals



12VDC 10A SM-1042 **SPST Heavy Duty Pushbutton Marine Switch**

SPST momentary action, brass body with large chrome-plated actuator. Can accommodate

panel thickness of up to 22mm. Mounting hole 16mm, screw terminals







\$24.95 \$22.35 \$19.70

Qty 10+ Qty 25+ 12VDC 30A SP-0701 \$19.95 \$17.70 \$15.70

Switches - DIL & Binary Coded

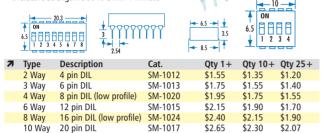
DIL SWITCHES

DIL Switches

- End stackableMoulded 0.3" IC packing outline for automatic insertion
- Smaller sized

12 Way

- Twin contact design
- Gold plated contact & tin plated terminals Switching: 25mA 24VDC
- Non-Switching: 100mA 50VDC Contact Resistance: Initial 50mQ max
- Dielectric Strength: 500VDC min 1 minute



SM-1018

\$2.90

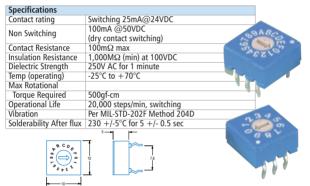
\$2.60

\$2.30

Binary Coded DIL Rotary Switches

24 pin DIL

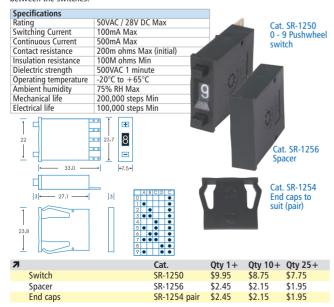
These tiny switches are designed for PCB use. These pins are moulded in and fully sealed. The body is moulded in UL 94V-0 flame-retardant plastic.



7	Binary Coded Hex	Cat.	Qty 1+	Qty 10+	Qty 25+
	0 through F output	SR-1220	\$7.95	\$6.95	\$6.25
	Binary Coded Decimal				
	0 through 9 output	SR-1222	\$7.95	\$6.95	\$6.25

0 - 9 BCD Pushwheel

These pushwheel switches can be ganged together to make any combination and can be panel mounted using the optional pair of end caps (SR-1254). Switch positions (0 - 9) indicated via large numbers (white on black) and outputs are BCD encoded. Optional spacers (SR-1256) can be ganged together to provide spacing (7.62mm each) between the switches.



Sealed PCB Rotary Switches

These switches have a removable ring with tab which can be inserted into the switch several ways to your particular (max) switch you could convert it to, say, 1 pole 7 way between stops. They have a standard 1/4" shaft.

Panel hole 10mm. Contact rating 150mA at 240VAC.

1 POLE

Configured from 1 pole 2 position through to 1 pole 12 position.

2 POLE

From 2 pole 2 position to 2 pole 6 position

3 POLE

From 3 pole 2 position to 3 pole 4 position

4 POLE

4 pole, 2 and 3 position

Break before make



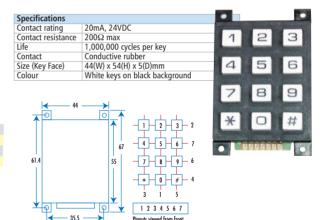


1		38 15.6
		45° 15°
		± 80
	1900	T22Ø
		60°

4	7	Type	Cat.	Qty 1+	Qty 10+	Qty 25+
	240VAC 150mA	1 pole	SR-1210	\$3.95	\$3.45	\$3.15
	240VAC 150mA	2 pole	SR-1212	\$3.95	\$3.45	\$3.15
	240VAC 150mA	3 pole	SR-1214	\$3.95	\$3.45	\$3.15
	240VAC 150mA	4 pole	SR-1216	\$3.95	\$3.45	\$3.15

12 Key Numeric Keypad

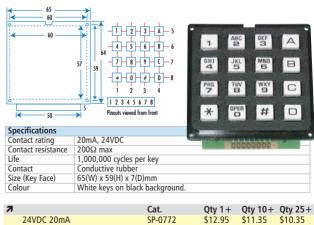
This telephone style keypad has many uses. It has 0-9, *, # - 3 x 4 way matrix.



7	Cat.	Qty 1+	Qty 10+	Qty 25+
24VDC 20mA	SP-0770	\$8.95	\$7.95	\$6.95

16 Key Alpha Numeric Keypad

0-9, *, #, A, B, C, D - 4 x 4 way matrix.



TAMPER SWITCHES

Alarm Tamper Style

This switch mounts behind a alarm module, bell or other item. If the device is tampered with or pulled from the wall, the alarm will be triggered. SPST. 18mm mounting hole.





Tamper (Pin) Style

Low cost spring loaded switch, simply make to frame (or earth) when pin is released i.e. by operating car or cabinet door, etc. 57mm overall, 12mm pin travel.

Bullet connector termination

7	Cat.	Qty 1+	Qty 4+	Qty 8+
Pkt 2	LE-8775	\$5.95	\$5.25	\$4.75

Metal Tamper (Pin) Style

Especially good for car bonnets, this heavy duty pin switch is nickel plated for protection from corrosion in hostile environments. The plunger

is plastic and can be cut to suit the required length/depth. Supplied with locking nuts and star washer. The bezel's mounting depth is also adjustable. Termination is via a 6.4mm spade lug.

Length (main body):	38mm	Including plug & lug:	70mm
Shaft diameter:	7.75mm	Fascia nut size:	11mm
Locking nut size:	12mm	Travel (max):	13.5mm.

7	Cat.	Qty 1+	Qty 2+	Qty 4+
Pkt 2	LE-8776	\$7.95	\$6.95	\$6.25

Metal Fascia Inset Pin Switch

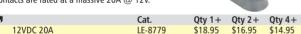
Inset pin switch with plated metal fascia. Suitable for many cars as a replacement door switch. The sturdy plunger can be cut to required length. Termination via right angle 6.4mm spade lug

or man space rag.			1	
Specifications			market a	
Fascia	34.5 x 16.5mm	Control of the		
Pin	27(L) x 8(dia)mm			
Depth behind fascia	15mm (not inc lug & pin)		100	W 191
Overall depth	51mm			
Travel (max)	8mm			
7	Cat.	Qty 1+	Qty 2+	Qty 4+

LE-8777

Van Sliding Door Style

Double action sliding door switch, primarily designed for van doors and tailgates. Supplied with rubber mounting plates, screws, template stickers and installation instructions. Contacts are rated at a massive 20A @ 12V.



FLOAT SWITCHES

Float Switch

ELECTROMECHANICA

VFRTICAL OR HORIZONTAL MOUNT NO or NC Ideal for use in conjunction with solenoid valves, water pumps, etc., this float switch can be made NO or NC (Normally Open or Normally Closed) by the orientation of the float. Horizontally mounted so the float falls, when the fluid level rises it will switch ON at maximum float height. Mounting the switch so the float rises upwards when the fluid level rises above switch height it will switch OFF. Vertical mounting, with the float down, will switch OFF at a high fluid level. Widely used in marine, automobile, industrial agricultural fluid level sensing applications.

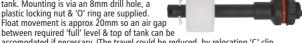
- 560mm wire leads
- 92.5(L)x 18(D)mm x M16
- Float Rise height: 40mm from centreline

Qty 10+ Qty 25+ SF-0920 \$17.70

See our range of Flow Meters on page 172

Top Mounting Float Switch (Level Detector)

This unit can be fitted to the lid or top cover of a tank. Mounting is via an 8mm drill hole, a



accomodated if necessary. (The travel could be reduced, by relocating 'C' clip retainer.) The switch is rated at 200V 0.5A so it is not suitable to directly switch mains. When container is full the switch is closed. Ideal for drinking water

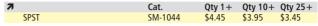
70(L)mm overall x 23(Dia.)mm (float)



Mini Mercury SPST

With a robust plastic housing, this switch has a mounting tab - you can screw it down - or use the self adhesive strip supplied. It has a 30cm lead. Switch contacts are open when the device is mounted horizontally

Dimensions: 33 (L) x 8(W) x 8.5(D)mm



BARREL LOCKS

Barrel Key, Mini - SPST

Chrome plated SPST mini key switch features spring return momentary operation and is supplied with two mini barrel keys Requires 28mm mounting depth and a panel cutout of 12mm. Contact rating:

0.5A@250VAC 1A@125VAC



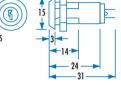


Cat. Qty 1+ Qty 10+ Qty 25+ 250VAC 500mA SM-1034 \$8.75

Standard Key, Mini - SPST

Rated at 3 amps. 2 keys supplied. Panel cutout 12mm. Mounting depth 29mm. Contact rating: 1A 125VAC / 0.5A @250VAC.





7	Cat.	Qty 1+	Qty 10+	Qty 25+
125VAC 1A	SM-1027	\$9.95	\$8.75	\$7.75

Standard Size - SPST

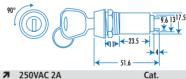
Solid barrel type. 19.5mm mounting hole.

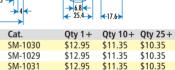
Supplied with 2 (two) keys. Rated @ 250V 2A.

Random Keys

Keyed Alike

\$6.25





66 4

6.7

Qty 10+ Qty 25+

\$1.75

Keyed Alike Type B **DPST Change-Over Key Switch**

Type A

This key switch uses tubular keys with black plastic inserts to easily identify them. It has 2 positions and the key is removable from both. There are 4 connection terminals, and it is a change-over type - ie. connection DPST.

Contact rating is 2A, 250VAC



Qty 10+ Qty 25+ 250VAC 2A SM-1032 \$13.95 \$12.35 \$10.95

NC Reed Switch*

Ideal for burglar alarms.

Coin not included for size purposes only · Glass length: 16mm

- Total length: 44mm Contact rating: 10W
- Switching voltage: 200VDC (max) • Switching current: 0.5A (max) • Carrying current: 1.0A (max) *Normally open, but closed when near magnet





Glass encapsulated

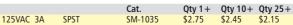
125VAC 3 amp AC. SPST.

Size glass 18(L)mm x 5.5mm dia.





\$1.95



ABS ENCLOSURES

IP65 Sealed ABS Enclosures

- Made with ABS Material
- Moulded in dark grey
- Operating temperature: -20° to +80°C
 Bosses on internal base allow fixing of PCBs horizontally, or connection of terminals etc.
- The lid and base incorporate a tongue and groove sealing system with a neoprene gasket
 Lid fixing screws are M-4 stainless steel (non-magnetic) into threaded brass inserts
- · Wall mounting holes and lid fixing screws are outside the sealing area thus preventing the ingress of moisture and dust
- Designed to IP65 of IEC529 and NEMS 4 (dust and hose proof)
 Internal guide slots for mounting PCB assemblies vertically (Not on HB-6120 or HB-6134)

Colour	W (mm)	D (mm)	H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
Dark Gre	ey 64	58	35	HB-6120	\$5.95	\$5.25	\$4.75
Dark Gre	y 115	65	40	HB-6122	\$8.95	\$7.95	\$6.95
Dark Gre	y 115	65	55	HB-6124	\$9.95	\$8.75	\$7.75
Dark Gre	y 115	90	55	HB-6126	\$12.95	\$11.35	\$10.35
Dark Gre	y 115	90	55 Flange	HB-6127	\$14.95	\$13.35	\$11.70
Dark Gre	y 171	121	55 Flange	HB-6125	\$19.95	\$17.70	\$15.70
Dark Gre	y 171	121	55	HB-6128	\$17.95	\$15.95	\$14.35
Dark Gre	y 171	121	80	HB-6129	\$21.95	\$19.70	\$17.35
Dark Gre	y 222	146	55	HB-6130	\$24.95	\$22.35	\$19.70
Dark Gre	y 222	146	75	HB-6132	\$28.95	\$25.95	\$22.95
Dark Gre	y 240	160	90	HB-6134	\$37.95	\$33.95	\$30.45



IP66 Industrial ABS Enclosures

Gasket seals, stainless steel hardware and IP66 rated for use in industrial, marine and other harsh environments. The closures have a locking catch that engages to positively hold the lid closed until disengaged. Each enclosure includes a 1.8mm galvanised chassis for mounting DIN rail, switchgear, relays or circuit breakers. A size for any application.



HB-6125





7	Cover	L (mm)	D (mm)	H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
	Opaque	125	125	75	HB-6400	\$9.95	\$8.75	\$7.75
	Opaque	125	125	75	HB-6402	\$19.95	\$17.70	\$15.70
	Opaque	200	200	130	HB-6404	\$34.95	\$31.45	\$27.90
	Transparent	200	200	130	HB-6410	\$12.95	\$11.35	\$10.35
	Transparent	175	125	75	HB-6412	\$32.95	\$29.45	\$26.45

IPX8 Rated ABS Cases

Specified to IPX8 for continuous immersion to protect your valuable gear. All feature O-ring seals, stainless hinges, padlock rings, lanyards and a transparent lid so you'll know what you put where. Very tough cases suitable for boating, 4WD, fishing, camping or kayaking. A range of sizes to take anything from a mobile phone to a multimeter and tools.

• IPX8 rated • Lockable • Lanvard included

MPS202 ABS CASE

Dimensions:

Internal: 158(W) x 90(D) x 72(H)mm External: 182(W) x 120(D) x 75(H)mm Cat HB-6428

MPS302 ABS CASE

Dimensions:

Internal: 200(W) x 100(D) x 83(H)mm External: 224(W) x 130(D) x 88(H)mm Cat HB-6430

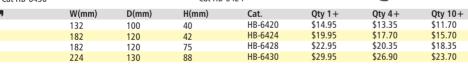
MPS1 ABS CASE

• Dimensions: Internal: 110(W) x 68(D) x 31(H)mm External: 132(W) x 100(D) x 40(H)mm Cat HB-6420

MPS201 ABS CASE

• Dimensions: Interna Extern Cat HE

ıal: 158(W) x 90(D) x 32(H)mm ıal: 182(W) x 120(D) x 42(H)mm B-6424			E	11.1	
	Cat.	Qty 1+	Qty 4+	Qty 10+	
	HB-6420	\$14.95	\$13.35	\$11.70	
	HB-6424	\$19.95	\$17.70	\$15.70	
	HR-6/128	\$22.05	\$20.35	¢18 35	



Bulkhead ABS Mount Cases

4 cases in the range. The two smaller sizes have moulded in square cable entries on each end, and holes for screws bolts to mount the case.

· Colour is black.

 The two larger cases have a moulded bracket at each end with a screw hole for easy mounting.

HB-6075

The base snaps into place, and there is a round 10mm dia hole in one side for cable entry.

HR-6080

The base mounts with 4 self tapping screws.

HB-6081

The base mounts to case with 4 self tapping screws included.





HB-6082

This case has mounting brackets at each end that are easily removable if you do not wish to mount the case.

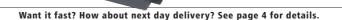
It has a clear plastic front/top plate that allows you to view the contents of the box. This plate is screwed on from the base/back and cannot easily be removed from the front.

Colour: Black and Clear

Bulkhead ABS Mount Cases

BLACK - I	HIGH IMPA	CT ABS					
W (mm)	D (mm)	H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+	
65	38	27	HB-6065	\$2.65	\$2.30	\$2.07	
72	44	28	HB-6068	\$2.95	\$2.60	\$2.30	
88	69	33	HB-6075	\$3.75	\$3.30	\$2.95	
112	67	36	HB-6080	\$5.75	\$4.95	\$4.60	
EXTRA DE	EP BULKH	EAD ABS MO	OUNT CASES				
W (mm)	D (mm)	H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+	
72	50	63	HB-6081	\$9.95	\$8.75	\$7.75	
BULKHEAD MOUNT CASE WITH CLEAR FRONT / TOP							
W (mm)	D (mm)	H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+	

HB-6082



\$11.95

HB-6082

Enclosures – ABS Jiffy & Instrument

ABS ENCLOSURES (CONTINUED)

Jiffy Boxes

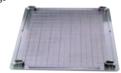
Manufactured from ABS plastic, these jiffy boxes not only look great, they have been designed to incorporate everything our customers wanted in a constructor's box. Sizes are compliant with industry standards externally and PCB fitting internally.

Impervious, dimple-free finish provides good adhesion for screen printing
 Lids feature a 5mm grid of 'centre punch' type points on the underside for quick, easy and accurate drilling
 Lids also feature a 10mm grid of scribed lines providing an easy and precise guide for cutting or filing cut-outs

PCB guides in the sides of the box have snap-in locators. Eliminates the need for stand-off hardware when mounting boards horizontally

Box also has a grid of 'centre punch' type points on the base of the inside
 Supplied with lid fixing screws and safety concealment plugs

	External (mm)	To Fit I	PCB (mm)
Size	Dimensions	Vertical	Horizontal
UB1	158 x 95 x 53	89 x 48	134 x 88
UB2	197 x 113 x 63	105 x 57	172 x 104
UB3	130 x 68 x 44	63 x 39	107 x 62
UB5	83 x 54 x 31	50 x 27	62 x 49



7		Cat	Qty 1+	Qty 4+	Qty 10+
UB1	Black	HB-6011	\$4.45	\$3.95	\$3.45
UB2	Black	HB-6012	\$6.95	\$6.25	\$5.50
UB3	Black	HB-6013	\$3.95	\$3.45	\$3.15
UB3	Grey	HB-6023	\$3.95	\$3.45	\$3.15
UB5	Black	HB-6015	\$2.95	\$2.60	\$2.30
UB5	Grey	HB-6025	\$3.45	\$3.05	\$2.75
UB5	Clear	HB-6005	\$3.45	\$3.05	\$2.75



BLUE (TRANSLUCENT IMAC® LOOK)

7	Cat	Qty 1+	Qty 4+	Qty 10+
UB5	HB-6004	\$3.45	\$3.05	\$2.75

Enclosure Potting Box

Protect your electronic assemblies against shock, temperature, humidity and chemicals

Moulded in high impact ABS plastic

Black in colour

• Flammability rating: UL-94HB



						WHERE NOT U
W (mm)	D (mm)	H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
39	39	27	HB-5202	\$1.50	\$1.35	\$1.20
45	30	25	HB-5200	\$1.00	\$0.90	\$0.80
70	50	20	HB-5204	\$2.95	\$2.60	\$2.30

Polyurethane Potting Compound

This potting compound is composed of a polyurethane base which is designed to electrically insulate and protect against dust and moisture. It features good thermal conductivity along with superior adhesion to various metals and plastics requiring encapsulation.

- · Allow 15 minutes for setting time
- Cures in around 4-5 hours
- 70ml

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	NM-2016	\$9.95	\$8.75	\$7.75

Flanged ABS Lids Version of Jiffy Boxes

These professional enclosures are identical to the UB3 & UB5 jiffy boxes, except they feature flanged lids for bulkhead/surface mounting. The exclusive moulded Jaycar drilling template on the inside of the lid is included, as are the screw hole plugs to hide the lid screws. Refer to the jiffy box information on the left for full detail on the drilling template. Ideal for automotive, security, audio/video plus a wide variety of other applications.

- Lid moulded, drill assist pilot holes on a 5
- &10mm pitch
 Four hole plugs to improve finish
- Moulded in ABS plastic
- Exclusive to Javcar.

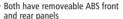
7	Cat	Qty 1+	Qty 4+	Qty 10+
UB3 Black	HB-6014	\$5.45	\$4.90	\$4.30
UB5 Black	HB-6016	\$3.95	\$3.45	\$3.15
UB3 Grey	HB-6024	\$5.95	\$5.25	\$4.75

Freecall order hotline: 1800 022 888

ABS INSTRUMENT CASE

High Impact ABS Instrument Cases

These top quality cases are ideally suited for instrumentation, telecommunication, or just to make your projects look fabulous.



and rear panels
Top and bottom have a tongue and groove joint and are lightly textured which offers a non-scratch surface & keeps the high quality finish

Guide slots provided for

vertical mounting of PCBs Bosses are provided for horizontal

mounting of PCBs Screws supplied to secure lid to base

· The large size has rubber feet supplied

GREV ARS - III 94HR

W (mm)	D (mm)	H (mm)	End Pane	els Cat.	Qty 1+	Qty 4+	Qty 10+
140	110	35	Black	HB-5970	\$8.95	\$7.95	\$6.95
225	165	40	Black	HB-5972	\$22.95	\$20.35	\$18.35

Plastic Instrument Cases

- Modern design case in matt finish surface.
- Ideal for desktop instruments.
- Top and base is in grey, with dark grey front and rear panels
- Moulded in high impact ABS plastic UL-94-HB
- Includes 4 pcs screws and rubber feet

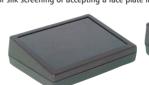
LIGHT GREY - DARK GREY END PANELS

W (mm)	D (mm)	H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
95	158	47	HB-5922	\$17.95	\$15.95	\$14.35
200	280	60	HB-5924	\$28.95	\$25.95	\$22.95

Desk Console Cases

B 1 1

Two sloping front cases moulded in high-impact ABS plastic. Both are black in colour and they have a smooth front panel area which is ideal for silk screening or accepting a face plate label



BLACK -	HIGH IMPA	CT ABS - UL9	4 V 0			шиння
V (mm)	D (mm)	H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
89	134	32/55	HB-6094	\$15.75	\$13.95	\$12.35
34	189	32/55	HB-6096	\$15.75	\$13.95	\$12.35









LACK - HIGH IMPACT ABS - UL94V0			4V0				9
(mm)	D (mm)	H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+	
39	134	32/55	HB-6094	\$15.75	\$13.95	\$12.35	
24	189	32/55	HB-6096	\$15.75	\$13.95	\$12.35	

Enclosures - ABS & Polycarbonate

ABS INSTRUMENT CASES

Console Box ABS

Moulded in high-impact ABS plastic, this console box comes with two facia panels - one blank, the other to suit LED/LCD display. Light grey in colour.

Dimensions:

- Facia: 77 x 46mm
- Facia Cut-out: 45 x 18mm.

LIGHT GREY - HIGH IMPACT ABS

W (mm) D (mm) H (mm) Cat. HB-6090 \$11.95 \$10.70 \$9.50 150 95 29/50

Mini ABS Instrument Case

The case is made from high impact ARS plastic and features adhesive rubber feet and removable front & rear plastic panels.

Exclusive to Jaycar

 An ideal enclosure for AV projects, automotive, test gear, etc.

W (mm)	D (mm)	H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
130	90	35	HB-5960	\$9.95	\$8.75	\$7.75

Keyfob Remote Control Case

Includes the case and hardware, which consists of pushbutton knobs, battery terminals, LED cover and keyring.



					-	
W (mm)	D (mm)	H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
32	50	10	HB-5605	\$6.45	\$5.75	\$4.95

3 Pin Plug Pack Case

Make your own plug in power supplies with our vented case. Complete with earth pin!

· Plug pins to the new insulated standard



W (mm)	D (mm)	H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
55	47	95	HB-5900	\$8.95	\$7.95	\$6.95

Remote Control Case

This case is ideal for a TV/VCR remote control. The case includes a battery compartment with sliding cover. It will accept either 2 x AA batteries or a 9V. The terminals for the AA batteries are included. The transmitting end of the box is supplied with 2 plastic panels, one the colour of the box, the other a red perspex for use with Infrared LEDs

*Includes Battery Contact Kit & Translucent Panel

BLACK -	HIGH	IMPACT	ABS	UL94VO
---------	------	---------------	-----	--------

W(mm)	D(mm)	H(mm)	Flame Retard	Cat.	Qty 1+	Qty 10+	Qty 20+
135	70	24	No	HB-5610	\$9.95	\$8.75	\$7.75

Low Profile Hangable Case with Clear Front

This case is thin enough to hang on the wall with the clear section in the front allowing easy viewing of the contents. It has keyhole cut-outs for hanging and the clear section is countersunk and held in place with self tappers included. Ideal for LED and display type projects.

Window/internal size: 108 x 108 x 15mm

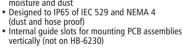
LIGHT GREY WITH MOUNTING FLANGE

W (mm)	D (mm)	H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
130	130	17	HB-6083	\$14.95	\$13.35	\$11.70

POLYCARBONATE & POLYSTYRENE ENCLOSURES

IP65 Sealed Polycarbonate Enclosures

- Made with Polycarbonate material
 Moulded in light grey.
- Operating temperature: -40 to +125C
 The lid and base incorporate a tongue and groove
- sealing system with a neoprene gasket Lid fixing screws are M-4 stainless steel (non-magnetic) into threaded brass inserts
- Wall mounting holes and lid fixing screws are outside the sealing area thus preventing the ingress of moisture and dust









LIGHT GK	LIGHT GREY									
W (mm)	D (mm)	H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+				
82	80	55	HB-6230	\$12.95	\$11.35	\$10.35				
115	65	40	HB-6212	\$13.95	\$12.35	\$10.95				
115	90	55	HB-6216	\$14.95	\$13.35	\$11.70				
171	121	55	HB-6218	\$19.95	\$17.70	\$15.70				
171	121	80	HB-6224	\$23.95	\$21.35	\$18.95				
222	146	55	HB-6220	\$29.95	\$26.90	\$23.70				

W (mm)	D (mm)	H (n	nm)	Cat.	Qty 1+	Qty 4+	Qty 10+		
64	58	35	NEW	HB-6211	\$9.95	\$8.75	\$7.75		
151	90	55		HB-6217	\$16.95	\$14.95	\$13.35		
171	121	55		HB-6219	\$21.95	\$19.70	\$17.35		
LIGHT GREY WITH CLEAR LID									
W (mm)	D (mm)	H (m	ım)	Cat.	Qty 1+	Qty 4+	Qty 10+		
171	121	55		HB-6248	\$23.95	\$21.35	\$18.95		
115	90	55	NEW	HB-6246	\$12.95	\$11.35	\$10.35		

IP54 High Quality Polystyrene Enclosures

This range includes a small flat case that is ideal for remote control transmitters, up to a case that is ideal for bench test equipment, and the best thing is that they are not expensive. All are supplied with removeable front and rear panels which are light grey in colour, with the rest of the case dark grey. They are moulded in ABS, conform to IP54 and IEC529 and NEMA4 with respect to moisture and dust proof sealing and flame retardant to UL94-VO. Guide slots are provided for vertical mounting of PCBs, and spacers are moulded in for horizontal mounting. All but the smallest two have M3 screws and brass inserts to hold top and bottom together.



DAIN OF	LI ADJ I	EAME KEIAK	DEINI 10 0E37			
W (mm)	D (mm)	H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
90	50	16	HB-6030	\$4.95	\$4.45	\$3.90
90	50	24	HB-6031	\$5.95	\$5.25	\$4.75
120	60	30	HB-6032	\$7.95	\$6.95	\$6.25
150	80	30	HB-6034	\$12.95	\$11.35	\$10.35
100	100	40	HR-6036	\$18.95	\$16.95	\$14.95







METAL INSTRUMENT CASES & ENCLOSURES

Professional Bench Enclosure

This cabinet has pre-punched ventilation holes, metal thread fastening screws, aluminium pre painted front and rear panels, up to the minute styling and facilities to mount internal hardware without recourse to drilling lids. Apart from this, the enclosure features cabinet heights that comply with standard IEC297 rack heights. Even though it is not a rack cabinet many components (especially transformers) are made to comply to these height dimensions.

Grev in colour.

W (mm)	D (mm)	H (mm)	Cat	Qty 1+	Qty 4+	Qty 10+
304	279	88	HB-5556	\$59.95	\$53.95	\$47.90

Pro Quality Instrument Cases

Our superb instrument cases will give your projects the professional appearance they deserve.

Internal mounting posts enable a wide combination of PCB's,

transformers, etc., to be accommodated

• PCB guide rails provided internally allow vertical PCB

positioning to several locations • Removable front and rear panels, attractive textured finish one side and plain the other. (Enables direct engraving, silk screen printing etc., to plain side)
Top and bottom split apart for

ease of construction or service. Feet included

Great for test instruments and other high grade projects



W (mm) D (mm)	H (mm)	Cat.	Otv 1+	Otv 4+	Qty 10+
200	160	70		\$19.95		\$15.70
LARGE -	VENTED	CASE				

LARGE - VENTED CASE								
W (mm) D (m	m) H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+			
260 190	80	HB-5910	\$22.95	\$20.35	\$18.35			

Economy Diecast Aluminum Boxes

- Excellent screening properties for EMI and RFI
 Ideal for projects subject to weather
- Made from 380 Die-cast aluminium alloy (BS1490 LM24)
 Ideal for instruments, meter cases, filter networks etc
- Robust, light weight/easy to machine
- Ideal for projects involving heat as the case itself makes an excellent heatsink
 Close fitting flanged lids

W (mm) D (mm)	H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
51	51	32	HB-5060	\$7.95	\$6.95	\$6.25
111	60	30	HB-5062	\$9.95	\$8.75	\$7.75
111	60	54	HB-5063	\$12.95	\$11.35	\$10.35
119	94	34	HB-5067	\$14.95	\$13.35	\$11.70
119	94	57	HB-5064	\$18.95	\$16.95	\$14.95

IP65 Sealed Diecast Aluminium Boxes

This range of boxes compare in quality to those English and Canadian ones that are VERY expensive. These are ideal for housing electronic assemblies, pneumatic, hydraulic & electrical devices for commercial & industrial environments.

Provides effective shielding of EMI and RFI.

- Aluminium diecast resistant to atmospheric and marine corrosion
 Designed to IP65 of IEC529 and NEMA4 (dust and hoseproof)
 Wall mounting holes and lid fixing screws are
- outside the sealing area
- The lid incorporates a recessed neoprene gasket
- Bosses on internal base for fixing PCBs horizontally or connection of earth grounding, etc
- Internal guide slots for mounting PCB assemblies vertically
- Screw holes for lid mounting are roll threaded
- Captive, recessed lid screws Heat rating up to 400° C
- Manufacturers and bulk users contact Jaycar for bulk pricing.

W (mm)	D (mm)	H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
64	58	35	HB-5030	\$9.95	\$8.75	\$7.75
115	65	30	HB-5036	\$14.95	\$13.35	\$11.70
115	65	55	HB-5040	\$18.95	\$16.95	\$14.95
115	90	55	HB-5042	\$21.95	\$19.70	\$17.35
171	121	55	HB-5046	\$34.95	\$31.45	\$27.90
222	146	55	HB-5050	\$36.95	\$33.45	\$29.45

Metal Enclosures

Aluminium cases finished in grey with black finish steel cover. Ventilated and supplied with rubber feet.

RELATED PRODUCT See our range of knobs on page 75



W (mm)	D (mm)	H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
83	102	53	HB-5441	\$11.25	\$9.95	\$8.95
102	150	61	HB-5442	\$14.95	\$13.35	\$11.70
134	150	76	HB-5444	\$19.95	\$17.70	\$15.70
160	184	70	HB-5446	\$24.95	\$22.35	\$19.70

Industrial IP66 Stainless Steel Enclosure

This heavy duty enclosure is perfect for any project requiring the protection provided by stainless steel. A foam rubber

seal inside the lid protects against dust and moisture giving the enclosure an IP66 rating. An internal mounting flange 15mm above the base has a row of M5 bolt holes for easily securing your project in place and there are even M6 earth bolts on the case and lid.

- Wall thickness: 1.5mm

- Internal Opening: 132(W) x 132(H)mm Internal Depth: 80mm Overall Dimensions: 150(W) x 150(H) x 85(D)mm



W(mm)	D(mm)	H(mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
150	85	150	HB-6413	\$89.95	\$80.95	\$71.95



3.4 +/-0.1mm

copper plated.











Specifications

Wall thickness

Box and lid

Lid screws

Ground screw

and washer

Gasket

Enclosures - Rack Mount

19" RACK MOUNT CABINETS & ACCESSORIES

19" Rack Mount Cabinets

Ideal for studios, PA, sound reinforcement, IT, or phone systems installations, with a size and configuration to suit any application. Coupled with our wide range of accessories and options, these 19" rack cabinets offer outstanding features. All come in 1.8mm solid steel powder coated cabinets with clear tempered glass doors. The sides can be removed for installation or maintenance access and all panels are key-lockable.

- · High strength and
- Cooling fan hole rigidity under load
 Camlock closures

- Contemporary design
 Front, sides and back lock separately
- Integrated power distribution
- Wall mounting without brackets
- Lift off side panels
- Static loading capacity 60kg
- Top or bottom cable entry

 Dimensions: 530(W) x 380(H) x 450(D)mm Cat HB-5170

• Dimensions: 530(W) x 493(H) x 450(D)mm Cat HB-5172

 Dimensions: 530(W) x 626(H) x 450(D)mm Cat HB-5174

7		Cat.	Qty 1+	Qty 4+	Qty 10+
	6U Rack Mount	HB-5170	\$179.00	\$160.95	\$142.95
	9U Rack Mount	HB-5172	\$219.00	\$196.95	\$174.95
	12U Rack Mount	HB-5174	\$259.00	\$235.00	\$209.00



Swing Frame Rack Mount Enclosure

Swing frame enclosures allow you to access the rear of your rack system for maintenance or easier installation. Tempered glass doors and locking panels all round. 6 or 12 unit enclosures available.

• Dimensions: 600(W) x 380(H) x 610(D)mm Cat HB-5180

 Dimensions: 600(W) x 630(H) x 610(D)mm Cat HB-5182

7	Cat.	Qty 1+	Qty 4+	Qty 10+
6U Swing Frame Rack Mou	unt HB-5180	\$249.00	\$225.00	\$198.95
12U Swing Frame Rack Mo	ount HB-5182	\$329.00	\$299.00	\$265.00



Open Wall Mount Rack Enclosures

Ideal for mounting in other enclosures, such as road cases, but can also be mounted stand-alone. One side is hinged so that patch panels can be easily accessed at the rear for reconfiguring patch sets

2U OPEN WALL MOUNT RACK ENCLOSURE

485(W) x 95(H) x 300(D)mm Cat. HB-5190

4U OPEN WALL MOUNT RACK ENCLOSURE

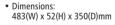
 Dimensions: 485(W) x 190(H) x 300(D)mm Cat. HB-5192



7		Cat.	Qty 1+	Qty 4+	Qty 10+
	2U Open Wall Mount Enclosure	HB-5190	\$39.95	\$35.90	\$31.90
	4U Open Wall Mount Enclosure	HB-5192	\$49.95	\$44.90	\$39.90

Ball Bearing Sliding Rack Shelf

Ideal for mounting computer keyboards or other equipment that needs to be accessed easily. The slides have ball bearing runners for smooth operation and will take a load of 20kg.





HB-5450



Qty 4+

\$88.95

Qty 10+

\$78.95

Fixed 19" Rack Shelves

Ideal for tuners, CD players, amplifiers or any other equipment that you want to include in your rack but doesn't have rack-mounting ears. Each shelf is punched with ample slots for ventilation and a folded return front and rear to take loads of up to 20kg. Solid steel construction, black powder coated finish.

1U FIXED RACK SHELF

• Dimensions:

483(W) x 45(H) x 305(D)mm Cat HR-5452

2U FIXED RACK SHELF

· Dimensions: 483(W) x 89(H) x 380(D)mm Cat HB-5454



\$99.00

7		Cat.	Qty 1+	Qty 4+	Qty 10+
	1U Fixed Rack Shelf	HB-5452	\$49.00	\$43.95	\$38.95
	211 Fixed Rack Shelf	HR-5/15/1	\$69.00	\$61.95	\$54.95

19" Rack Blank Panels

Blank panels for filling in unused space or configuring panels to your own requirements. Black powder coated steel, 1or 2 unit, vented or plain. The vented panels are also useful at the back of rack enclosures for attaching wiring looms to

 Dimensions: 483(W) x 45(H)mm Cat HB-5420

• Dimensions: 483(W) x 89(H)mm Cat HB-5422

 Dimensions: 483(W) x 45(H)mm Cat HB-5424

2U - VENTED

• Dimensions: 483(W) x 89(H)mm Cat HB-5426

7		Cat.	Qty 1+	Qty 4+	Qty 10+
	1U Blank Panel	HB-5420	\$10.50	\$9.25	\$8.25
	2U Blank Panel	HB-5422	\$12.95	\$11.35	\$10.35
	1U Vented Blank Panel	HB-5424	\$18.95	\$16.95	\$14.95
	2U Vented Blank Panel	HB-5426	\$27.95	\$24.95	\$22.35

Rack Panel Accessories

A range of accessories to complete your rack system - blank panels for filling in space, vent panels and panels for fans or mic sockets, braked castors and feet for keeping it all where you want it. Panels are black powder coated steel, 1, 2 or 3 unit

1U 12 X XLR SOCKET PANEL

 Dimensions: 483(W) x 45(H)mm Cat HB-5436

3U 3 X FAN PANEL

- Dimensions: 483(W) x 133(H)mmSuits 120mm fans
- Cat HB-5438

UNIVERSAL BRAKED CASTORS

- · Ball bearing swivel castors
- universal mounting plate
 Suitable for rack cabinets,
- speaker boxes, etc.
- Sold as a set of 4 Mount plate: 70(L) x 55(W)mm Wheel: 50(Dia) x 30(W)mm Overall Height: 75mm

Cat HB-5470



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UNIVERSAL ENCLOSURE FEET

- · Adjustable height M12 threaded shaft
- Supplied with locking nut
- Sold as a set of 4
- Suitable for rack cabinets, speaker boxes, etc.
- Dimensions: 60(H) x 50(Dia.)mm
- Cat HR-5472

7		Cat.	Qty 1+	Qty 4+	Qty 10+
	1U XLR Socket Panel	HB-5436	\$12.95	\$11.35	\$10.35
	3U Fan Panel	HB-5438	\$19.95	\$17.70	\$15.70
	Braked Castors - Set of 4	HB-5470	\$29.95	\$26.90	\$23.70
	Adjustable Feet - Set of 4	HR-5472	\$19.95	\$17.70	\$15.70

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Enclosures - Rack Mount Accessories

19" RACK MOUNT ENCLOSURES & ACCESSORIES (CONTINUED)

Rack Cable Supports

Takes the pain out of wiring and fault-finding rack cabinets. Your cables are kept organised and neat, with the support also providing strain relief.

• Dimensions: 483(W) x 45(H) x 62(D)mm Cat HB-5430

 Dimensions: 483(W) x 89(H) x 82(D)mm Cat HB-5432



7		Cat.	Qty 1+	Qty 4+	Qty 10+
	1U Rack Cable Support	HB-5430	\$24.95	\$22.35	\$19.70
	2U Rack Cable Support	HB-5432	\$29.95	\$26.90	\$23.70

Patch Lead Management Panel

Keeps all your patch leads under control.



DIN Rail

Metal DIN rail, standard size for mounting power supplies, relays, terminals etc.

• 1 metre in length



Enclosure Mounts for DIN Rail

Makes mounting standard enclosures onto standard DIN rails easy. Supplied as a pair with self tapping screws for the enclosure.



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Complies with IEC 297 / EIA RS-310 C-1977 / DIN 41494 standards.

Each cabinet is made from phosphated steel and coated with a dark grey enamel. The colour matched rack front panel is in 3mm aluminium with extruded handles (excluding 1U). The rear panel is aluminium as well. The top, bottom and sides of each cabinet are liberally punched with ventilation holes.

All screw fasteners are metal thread - not self tappers. Top, bottom, front and rear of enclosure can be separately removed without affecting the integrity of the cabinet. Each enclosure comes with punched internal rail bars to facilitate PCB, transformer, filter capacitor etc, mounting independent of cover panels. Each cabinet also features an internal sub panel (in 1.5mm enamelled aluminium) which is adjustable from 0-20mm from the back of the front panel.

This panel is ideal for mounting panel hardware (no screws need appear on front panel). Rear panel is also adjustable 0-20mm inwards. The entire cabinet is packed flat for convenient transport. Rubber mounting feet are provided.

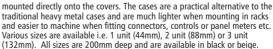
7	Cat	Qty 1+	Qty 4+	Qty 10+	
1 unit enclosure	HB-5120	\$69.95	\$62.95	\$55.95	
2 unit enclosure	HB-5125	\$109.00	\$97.95	\$86.95	
3 unit enclosure	HB-5130	\$129.00	\$115.95	\$102.95	

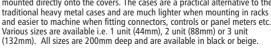
Dimensions(mm)	10	20	30
Panel height	44	88	133
Cabinet height	39	84	128
Cabinet depth	245	335	335
Width	482.6	482.6	482.6

ABS Plastic Rack Mount Cases

The cases are made of strong ABS plastic and supplied in a knock-down form that can be assembled in seconds with just a screwdriver.

Slots are moulded into the top and bottom covers to provide good cross-flow ventilation while moulded PCB standoffs allow printed circuit boards to be





1311		
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\$13.35



\$14.95

Rack Mount Cat 5e/6 Patch Panels

Suitable handles available separately (HB-5458)
Dimensions (when expanded): 930(L) x 88(H)mm

Dimensions (when contracted): 531(L) x 88(H)mm

Capable of accommodating 2U sized rack equipment of various

lengths. The modular design allows you to slide the rack out to the correct length of the device. Mounting holes are littered down the body of each shelf to allow for the variety of

custom installations this may be used for. Though not recommended, the stopping pin on the slide

could be bent down transforming it into a fully

Sleek attractive looking rack mount 24 port patch panel with a hard metal exterior. Numbered ports and a labelling area for each port. Also comes with instruction stickers on the back for easier cabling. See our tool section for punch-down tools.

HB-5456

HB-5458

• Takes up 1 rack unit

2U Shelf Set

2U Handles - Pair

removable support shelf.

· Galvanised steel construction Suits 2U sized equipment

- 24 port
- Numbered ports
- Labelling area
- Cat.5e or Cat6



\$16.95

1	Cat.	Qty 1+	Qty 4+	Qty 10+
24 Port - Cat 5e Panel	YN-8046	\$49.95	\$44.90	\$39.90
24 Port - Cat 6 Panel	YN-8048	\$69.95	\$62.95	\$55.95

Rack Cabinet Panels

Quality brushed anodised panels in both silver (natural) or black finish

7	Finish	Size		Cat	Qty 1+	Qty 4+	Qty 10+
	Natural	44mm	1U	HB-5401	\$16.95	\$14.95	\$13.35
	Natural	88mm	2U	HB-5402	\$24.95	\$22.35	\$19.70
	Natural	132mm	3U	HB-5403	\$29.95	\$26.90	\$23.70
	Black	44mm	1U	HB-5404	\$16.95	\$14.95	\$13.35
	Black	88mm	2U	HB-5405	\$24.95	\$22.35	\$19.70
	Black	132mm	311	HR-5406	\$29.95	\$26.90	\$23.70







Size	vv(mm)	H(mm)	ע(mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
1U	431	44	203	HB-5135	\$34.95	\$31.45	\$27.90
2U	431	88	203	HB-5145	\$44.95	\$40.45	\$35.90
3U	431	132	203	HB-5160	\$59.95	\$53.95	\$47.90
BLACK							
Size	W(mm)	H(mm)	D(mm)	Cat.	Qty 1+	Qty 4+	Qty 10+

Freecall order hotline: 1800 022 888

Soldering Irons

SOLDERING EQUIPMENT

For the first time in, like, forever we have not deleted an iron from our lineup and put in a new one. This is a good thing. It's not that we haven't looked - there is just nothing that we can find that is better than what we already have. That means a reliable range of spare parts etc, etc.

The major additions to this year's lineup are two gas powered irons on page 122 and an improved micro blow torch on page 123.



RoHS means Restriction of Hazardous Substances.

SOLDERING IRON - PORTABLE

5W Soldering Iron - USB Powered



You wouldn't think USB could supply enough power for a usable soldering iron, but it works by using two USB ports and produces enough heat to be a viable service tool. The iron itself is shirt pocket sized so is ideal for the roving technician. Next time someone asks you if you have a soldering iron on you, you'll be well prepared. Never be caught out again.

3 3					
Specifications					
Power	4 - 5W		THE PERSON NAMED IN	THE I	
Current	800mA	-	CHILD !	THE PARTY OF THE P	
Max temperature			The second second	PRICE	TE ER
Dimensions	120(L)mm		America		WARRANTU
7		Cat.	Qty 1+	Qty 3+	Qty 6+
5W Solderin	g Iron	TS-1537	\$19.95	\$17.70	\$15.70

6W Soldering Iron - Battery Powered



We have been surprised by the popular acceptance of this product, considering its modest power rating. Don't expect too much, but it will re-solder a dry joint or fix a solder lug, etc. It is ideal in potentially explosive situations, such as a bilge, or where petrol fumes may be present. Reaches full temp in about 10 seconds.

- Uses 3 x AA hatteries (not included)
- Safety cover that locks the switch to "Off" so it won't discharge inside your tool box.
- Dimensions: 175(L) x 36(W) x 18(D)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
6W Soldering Iron	TS-1535	\$19.95	\$17.70	\$15.70

SOLDERING IRONS - 12VDC

60W Soldering Iron - 12VDC

This is a quality 12V soldering iron. It plugs into your car cigarette lighter and with 60 watts it's hot enough to solder terminals, heavy cable etc.

2.5 metre lead length

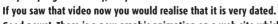


NOTE: Before use, check your car's wiring is enough to carry the current, or else connect direct to battery

7	Cat.	Qty 1+	Qty 3+	Qty 6+
Soldering Iron	TS-1530	\$17.95	\$15.95	\$14.35
Spare Tip	TS-1531	\$6.95	\$6.25	\$5.50

FANTASTIC WEB SITE

In the 60's IBM produced a video which attempted to show the lay person the enormous dynamic range of SCALE of the very very big to the very, very small.



Good news! There is a new graphic animation on a web site which shows down to an (alleged) "string" (the smallest particle postulated) up to the very large structures in the universe and everything in between in scale.

This is a truly remarkable explanation of the scale of the world in which we are a tiny part. It is indeed so remarkable it may trigger a bright young person to be inspired to take up science as a career.

Please have a look. http://htwins.net/scale2/

SOLDERING IRONS - 240V

25W Soldering Iron

Ideal for the hobbyist and handy person. Has a stainless steel barrel and orange cool grip, impact resistant handle.



7	Cat.	Qty 1+	Qty 3+	Qty 6+
Soldering Iron	TS-1465	\$13.95	\$12.35	\$10.95
Spare tip	TS-1466	\$3.95	\$3.45	\$3.15

20/130W Turbo Soldering Iron

Sometimes you need that extra bit of heat in your soldering. Push the little red button on this iron and you get a lot more power - from 20 watts to 130 watts to be precise. Weller-style removable barrel, plated tip and ceramic element.



7	Cat.	Qty 1+	Qty 3+	Qty 6+
Soldering Iron	TS-1554	\$17.95	\$16.10	\$14.30
0.5mm conical tip	TS-1555	\$4.95	\$4.45	\$3.90
1mm conical tip	TS-1556	\$4.95	\$4.45	\$3.90
2mm chisel tip	TS-1557	\$4.95	\$4.45	\$3.90

20/130W Soldering Iron Starter Kit

All the soldering essentials for the hobbyist. This kit represents excellent value, the best in soldering we've seen, anywhere. The sum of the individual parts amount to more than double the price we are selling this kit for

Kit contains:

- 240V 20/130W turbo soldering iron
- Spare tip
- Basic stand • 1mm solder in
- dispenser tube
- · Metal solder sucker with

spare tip and O-ring	
78	

spare tip and O-ning				
7	Cat.	Qty 1+	Qty 3+	Qty 6+
Starter Kit	TS-1651	\$24.95	\$22.35	\$19.70

30W Temperature Controlled Soldering Iron

If your budget doesn't extend to a soldering station, you can still have temperature control. This iron is adjustable with a dial on the handle.

- It has a temperature range of 200 450°C, high enough for silver soldering if needed.
- Plated long-life tip.
 Spare tip available TS-1542 1mm conical tip



SOLDERING IRONS - 240V (CONTINUED)

40W Soldering Iron

Ideal for the hobbyist and handy person. Has a stainless steel barrel and orange cool grip impact-resistant handle.

Fully electrically safety approved.Spare tip to suit use Cat. TS-1476



7	Cat.	Qty 1+	Qty 3+	Qty 6+
Soldering Iron	TS-1475	\$18.95	\$16.95	\$14.95
Spare tip	TS-1476	\$4.95	\$4.45	\$3.90

46W Goot Soldering Pencil - 240V



The heater on/off control uses a zero-volt switch circuit which reduces noise

• Tip temperature is set at 320°C The power lead is made from silicone rubber, which is very flexible
The handle incorporates a ribbed rubber piece for superior grip

Electricity Safety Approval Number SAITE20185

IAPANESE MADE

\$6.95

7	Cat.	Qty 1+	Qty 3+	Qty 6+
Soldering Pencil	TS-1430	\$79.95	\$71.95	\$63.95

SPARE TIPS TO SUIT 15-1430					
7	Cat.	Qty 1+	Qty 3+	Qty 6+	
0.5mm Conical Tip (As supplied with iron)	TS-1432	\$19.95	\$17.70	\$15.70	
0.3mm Conical Tip	TS-1434	\$19.95	\$17.70	\$15.70	
3.0mm Chisel Tip	TS-1436	\$19.95	\$17.70	\$15.70	

80W Soldering Iron

Ideal for the hobbyist and handy person. Has a stainless steel barrel and orange cool grip, impact resistant handle.

- Fully electrically safety approved.
- Spare tip to suit use Cat. TS-1486



Soldering Iron	15-1485	\$22.95	\$20.35	
Spare tip	TS-1486	\$8.95	\$7.95	

GAS SOLDERING IRONS & TORCHES

Pencil Butane Torch

Pocket sized gas torch for heatshrinking, soldering etc and uses standard butane gas. Adjustable flame, all metal construction.



Butane Gas

Use it for filling up your gas soldering iron, flame torches, cigarette lighters, etc. Includes five different adaptors, which cover most different gas valves. Includes filling instructions.

- · Enough gas for many many refills
- Cannot be sent by post



Freecall order hotline: 1800 022 888

			-	
71	Cat.	Qty 1+	Qty 4+	Qty 10+
150g	NA-1020	\$5.95	\$5.25	\$4.75

Low Cost Gas Soldering Iron



A low cost alternative for the DIY person, this butane gas soldering iron features adjustable tip temperature and a fold-out stand. Remove the soldering tip and you have a flame torch for heatshrink etc. Great for soldering, cutting plastic, or heat shrinking plastic

• Dimensions: 210(L) x 20(dia)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
Soldering Iron	TS-1111	\$26.95	\$23.95	\$21.35
Spare Catalyst	TS-1104	\$14.95	\$13.35	\$11.70
1mm Conical Tip	TS-1105	\$4.95	\$4.45	\$3.90

Gas Soldering Iron / Torch Kit

Everything you need to solder, silver solder, braze, heatshrink, strip paint etc. The iron is refillable with standard butane gas and has an on/off switch and a built-in stand for safety. Extra soldering, torch and cutting tips are included, all housed in a moulded storage case. Replacement gas: NA-1020

- · 3 soldering tips
- 1 torch attachment
- 1 rope cutter
- 178mm long



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TS-1112	\$39.95	\$35.90	\$31.90

Pro Gas Soldering Tool Kit

A sturdy, portable, self-igniting butane powered gas soldering iron tool kit with 3 tips. Produces a 1300°C adjustable flame for low end brazing, tin/plastic melting, automotive repair work, welding and of course heat shrinking. Supplied with 3 interchangeable metal tips for PCB work. For extra convenience the torch has a handy retractable stand so you can rest it somewhere without worrying about it rolling around. It is supplied in a plastic carry case that includes a cleaning sponge, extra tips, a deflector and a cap for the soldering iron.

Spare tips available separately: TS-1116 - 3mm Flat TS-1117 - 4mm Chisel TS-1118 - Blower Tip

Specifications	
Operating time	80-100 min (on minimal flame)
Gas capacity	20ml
Ignition	Internal Piezo Crystal igniter
Weight	115g without gas
Temperature of torch	Up to 1300°C
Temperature of hot blow	Up to 650°C
Temperature of soldering	Up to 500°C
Case dimensions	236(L) x 32(W) x 37(D)mm



7		Cat.	Qty 1+	Qty 3+	Qty 6+
Pı	ro Gas Soldering Tool Kit	TS-1113	\$69.95	\$62.95	\$55.95
3	mm Flat Tip	TS-1116	\$4.95	\$4.45	\$3.90
4	mm Chisel	TS-1117	\$4.95	\$4.45	\$3.90
В	lower Tip	TS-1118	\$12.95	\$11.35	\$10.35

3 in 1 Function Heat Blower and Soldering Iron

A handy 3-in-1 unit with flame or flameless heat blower and soldering iron function. Great for general heating, drying, melting, soldering, heat shrinking etc. It also features adjustment for temperature control, Piezo

ignition, child resistant latch and uses butane gas. The tip has a sturdy cap for when not in use. Ideal for hobbyists and



Spare Tip available: TH-1603 Butane gas required - use NA-1020

7	Cat.	Qty 1+	Qty 3+	Qty 6+	
Gas Soldering Iron	TH-1604	\$29.95	\$26.90	\$23.70	
Spare Tip					
1mm Conical Tip	TH-1603	\$3.95	\$3.45	\$3.15	

Soldering Irons

Piezo Ignition Butane Gas Torch

Perfect for silver soldering, brazing, heat treating, heat-shrinking, paint removal etc. It's able to produce a flame about 100mm long, so is capable of more than light-duty work. The 64ml tank gives a burn time of 60-70 minutes and uses any butane gas. It also has an adjustable flame, a child-proof piezo ignition button and a stand so you don't knock it over and burn the house down.

- Piezo ignition with safety lock
 1300° C adjustable flame
- Butane gas refill: NA-1020
- Dimensions 150 (H), base 69 x 69mm



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TS-1660	\$39.95	\$35.90	\$31.90

Micro Blow Torch - Large Flame

A compact, versatile large flame micro blow torch you should keep close by for all your DIV or culinary projects. Adjust the flame size to suit a wide variety of applications including brazing, heat shrinking and cooking. The torch provides enough weight for control without compromising its portability. A child restraint safety latch avoids accidental ignition of the flame.

- Auto ignition (Piezo)

7	Cat	Otv 1 ±	Oty 3 +	Oty 6+
Dimensions	128(L) x 65(W) x 15	56(H)mm		,
Net weight	183g			1
Operation time (at mid. setting)	75min			WARRANTY
Gas capacity	40ml			GEAR
Flame Temperature	1300°C			
Specifications				il .
 Refuel Child Restraint/Safety Latch GS/TUV, BS, CPSC, CE Butane gas refill: NA-1020 	UEU OIE			
riato igintion (riczo)				

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TS-1661	\$49.95	\$44.90	\$39.90

GAS SOLDERING IRONS - PORTASOL

A leading brand recognised worldwide. Portasol products are designed and manufactured in Ireland, to the highest quality standards. Since commencing operation in 1983, they have forged their way into the market with some of the most rugged and reliable gas powered soldering and heating tools

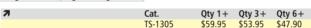
in the world. They utilise catalytic combustion (flame tips excluded), which converts the gas flame into infrared radiation. It is a safe, flameless way of heating the tips evenly and continuously. They all use standard butane gas, and have a variety of tips available to support a wide range of applications.

Portasol Technic Gas Soldering Iron

The Portasol Technic combines compact power, and convenient reliability, making it one of the most versatile gas soldering irons available. It offers a run time of around 60 minutes, and tip temperature is adjustable up to 450°C. With equivalent electrical power of between 10 and 60 Watts, it is ready to tackle just about anything. The protective end cap features a built in flint type igniter, and if the gas is left on, it will turn it off when replaced. If a compact, versatile and reliable gas iron is what you're after, then the Portasol Technic is for you.

Specifications	
Operating time	60 min (approx).
Refill time	10 sec (approx).
Ignition	Flint ignitor in end cap.
Dimensions	170(L) x 19(Dia)mm.
Weight	60g without gas.

TIPS TO SUIT 1.0mm Conical TS-1306 2.4mm Chisel TS-1307 \$23.95 4.8mm Chisel TS-1308 \$23.95



Portasol Pro Piezo Gas Soldering Iron

The Portasol Pro Piezo is a powerful gas soldering iron featuring an adjustable temperature control allowing soldering tip temperatures up to 580°C. With adjustable temperature control allowing soluting up temperatures up to 360°C. With equivalent electrical power of between 15 and 75 Watts, there is little that's not possible with this beauty. It incorporates a viewing window at the end of the gas tank, to keep an eye on the fuel level. The fuel tank fills in around 20 seconds, and will provide approximately 45 minutes of run time. Ignition is via the built in Piezo crystal mechanism, and the end cap provides safety gas shut off when replaced. The Portasol Pro Piezo is a dream to use, and will not let you down.

• 2.4mm double flat tip supplied.

Operating time	45 min (approx).
Refill time	20 sec (approx).
Ignition	Internal Piezo crystal ignitor.
Dimensions	178(L) x 22(Dia)mm.
Weight	75g without gas.

TIPS TO SUIT		
1.0mm Chisel	TS-1311	\$23.95
2.4mm Chisel	TS-1312	\$23.95
4.8mm Chisel	TS-1313	\$23.95
Hot Air Blow	TS-1314	\$23.95
Hot Knife	TS-1315	\$23.95
Flame	TS-1316	\$23.95



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TS-1310	\$99.00	\$88.95	\$78.95

Portasol Super Pro Gas Soldering Iron

The Portasol Super Pro is the big brother of all irons in the range. It features adjustable tip temperature up to 580°C, with equivalent electrical power of between 25 and 125W! 125W may seem somewhat excessive to some. You don't need a V8 to drive around town, but it's nice to know that the power is there when it's needed isn't it? Ignition is achieved with the internal Piezo crystal mechanism, and run time is around 2 hours on a 30 second refill. The stainless steel finished gas tank features a viewing window to keep an eye on fuel level, & the protective end cap also acts as a safety cut off for the gas valve control when replaced. With the various tips available & huge power at hand, no job is a match for the Portasol Super Pro.

2.4mm tip supplied.

Specifications	
Operating time	120 min (approx).
Refill time	30 sec (approx).
Ignition	Internal Piezo crystal ignitor.
Dimensions	234(L) x 25(Dia)mm.
Weight	135g without gas.

TIPS TO	O SUIT		
1.0mm	Chisel	TS-1321	\$24.95
2.4mm	Chisel	TS-1322	\$24.95
4.8mm	Chisel	TS-1323	\$24.95
Hot Air	Blow	TS-1324	\$24.95
Hot Kni	fe	TS-1325	\$24.95





TS-1320 \$115.00 \$103.95 \$91.95 Portasol Super Pro Gas Soldering Tool Kit

Features 90 minute run time, 10 second fill, maximum 1300° temperature and 40 second heat up. This kit contains a Portasol Super Pro Gas Soldering Iron and the following.

- Quality storage case2.4mm double flat tip (TS-1322)
- Hot air blow (TS-1324)
- Hot air deflector
- Cleaning sponge and tray.
- 4.8mm double flat tip (TS-1323)
 Hot knife tip (TS-1325)

Qty 1+ Qty 3+ Qty 6+ Cat. \$159.00 \$142.95 \$126.95 TS-1328

Portasol Pro Piezo Gas Soldering Tool Kit

This kit contains a Portasol Pro Piezo Gas Soldering Iron and the following.

- Quality storage case Cleaning sponge and tray
- 2.4mm double flat tip (TS-1312)Hot air blow (TS-1314)
- Hot knife tip (TS-1315)
- Hot air deflector
- Flame tip (TS-1316)



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TS-1318	\$129.00	\$115.95	\$102.95

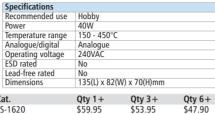
SOLDERING STATIONS - 240V

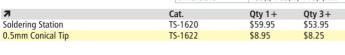
40W Temperature Controlled Soldering Station

An ideal entry-level soldering station for the hobby user. This station comes with a lightweight iron with anti-slip grip and tip cleaning sponge, with temperature adjustment up to 450°C. It also has a 4mm banana socket connected to mains earth for soldering static-sensitive components.

• Spare tip 0.5mm conical: TS-1622







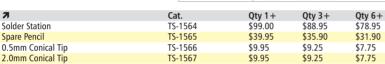
48W Temperature Controlled Soldering Station

Ideal station for the advanced hobby user. It features accurate analogue temperature adjustment, ceramic element and a lightweight pencil that will give you hours of fatigue-free soldering. The stand has spare tip storage and is very sturdy.

Spare pencil: Cat TS-1565 Spare tips: 0.5mm Conical Cat TS-1566 2.0 mm Conical Cat TS-1567



Specifications	
Recommended use	Hobby
Power	48W
Temperature range	150 - 450°C
Analogue/digital	Analogue
Operating voltage	24V
ESD rated	No
Lead-free rated	Yes
Dimensions	150(L) x 115(W) x 92(H)mm





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60W Lead Free Soldering Station with LCD PanelDiffering types of lead-free solder have a variety of melting points which can create problems for older soldering stations or those not designed for lead free solder. This excellent soldering station is particularly suited to lead-free soldering and is just as capable with ordinary leaded solder. The iron has a wide temperature range which is microprocessor controlled and maintained to within a few degrees of the selected setting. The lightweight soldering pencil is fitted with a soft insulated rubber grip for comfortable long term use and has a silicon rubber sheathed power cable that won't be damaged by contact with the hot soldering tip. It is connected to the main unit via a 1.1m low voltage cable which is terminated with a secure 5 pin connector. The control unit houses the temperature controls and simultaneously displays the set operating temperature and actual tip temperature, as well as system status on its digital LCD panel. For a list of spare parts search for TS-1390 on our website.

Conical Tips available: 0.4mm conical tip TS-1391 1mm conical tip TS-1392 2mm conical tip TS-1393 3mm conical tip TS-1394



Specifications	
Recommended use	Trade / Industrial
Power	60W
Temperature range	160 - 480°C
Analogue/digital	Digital
Operating voltage	24VAC
ESD rated	No
Lead-free rated	Yes
Dimensions	130(L) x 170(W) x 240(H)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
Solder Station	TS-1390	\$179.00	\$160.95	\$142.95
0.4mm Conical Tip	TS-1391	\$12.95	\$11.35	\$10.35
1mm Conical Tip	TS-1392	\$12.95	\$11.35	\$10.35
2mm Chisel Tip	TS-1393	\$12.95	\$11.35	\$10.35
3mm Bevel Tip	TS-1394	\$12.95	\$11.35	\$10.35

PARTY SECTION OF STREET

SOLDERING IRON TIPS & MAINTENANCE

There's a few people in our offices that were on the tools for 20 years or so before they worked here. Some of these old hands still have and use the first soldering station they ever bought and will attest to the fact that you can make a good soldering station, and the iron in it, last for 20 years or more if you look after it, so here's the benefit of our experience:



- Make sure you stock up on the consumables that your iron uses, especially tips. There's no guarantee that the tips will be available forever. We make every effort to ensure that spares are available for the stations we sell, but we can never guarantee the company who made your iron (and the tips) won't go under.
- 2. Tin the tip of your iron as it heats up by coating it with solder. This will assist the transfer of heat to the joint and extend tip life.
- 3. Get in the habit of removing the tip from your iron once a month or so, cleaning the barrel and ferrule, then refitting it. It's not uncommon for tips to seize in the barrel of an iron, never to be removed. If this happens, you'll be shopping for a new iron. A good tip is to take the tip out when the iron is stone cold. The metal in the tip will have contracted and it will be easier to remove.
- Keep your tip-cleaning sponge clean and wet it's the water in the sponge that helps remove molten solder and flux residue from the end of the tip.
- 5. If you need to clean the tip, do so with a soft nylon kitchen pad, and NEVER use a file on the top of a soldering iron. Most modern tips used in electronics have a tip that is plated. The reason for this is that the flux in the solder would quickly eat the copper in the tip if it were exposed. Eventually, the plating will wear away, but don't file it away.
- 6. Invest in a stand for your iron, or better yet, invest in a soldering station. Soldering iron burns hurt...a lot. With the low cost of soldering stations, there's no reason why everyone can't have a temperature-controlled soldering station on their bench.

Soldering Stations

SOLDERING STATIONS - 240V (CONTINUED)

60W ESD Safe Solder/Desolder Rework Station

Complete solder/desolder station for production and service use. Both the soldering pencil & hot air blower temperature are microprocessor controlled for precise control of dynamic thermal performance where you need it - at the work tip.

The control unit has two LCDs that display the set temperature and the actual tip or nozzle temperature in Celsius and Fahrenheit.

The temperature is easily adjusted in 1° increments with simple up/down buttons and the soldering/rework functions can be operated independently of each other.



7	Cat.	Qty 1+	Qty 3+	Qty 6+
Solder Station	TS-1574	\$369.00	\$335.00	\$299.00
2.5mm Single Tip	TS-1575	\$13.95	\$12.35	\$10.95
4.4mm Single Tip	TS-1576	\$13.95	\$12.35	\$10.95
10 x 10mm Quad Tip	TS-1577	\$19.95	\$17.70	\$15.70
15 x 15mm Quad Tip	TS-1578	\$19.95	\$17.70	\$15.70



70W ESD Safe Anti-static Temperature Controlled **Soldering Station with Digital Display**

Precision, Japanese manufactured instrument with excellent temperature stability and anti-static characteristics.

SOLDERING PENCILLightweight pencil features a grounded tip, ceramic heater, integrated temperature sensor and very supple silicone rubber grip. The temperature sensor provides precise tiptemperature sensor provices precise up-temperature information to the heater controller, which maintains the selected heat setting with a high degree of accuracy. The tip fits snugly over the heater element providing fast heat transfer and tip temperature recovery during heavy soldering. The 1.1m silicone sheathed cord attaches to the controller via a 5 pin DIN connector

• 0.5mm tip supplied

CONTROL UNIT

The control panel includes a digital temperature display unit, rotary temperature control, calibration control and display changeover switch to display either the desired or actual tip temperature. The darkened see-through cover prevents accidental temperature change but allows for easy access when required.

Control dimensions, weight: 146(L) x 115(W) x 98(H)mm, 1.5kg

Specifications	
Recommended use	Trade / Industrial
ESD rated	Yes
Lead-free rated	Yes
Analogue/digital	Digital
Soldering iron	
Power	70W
Temperature range	200-480°C
Operating voltage	24VAC
Dimensions	146(L) x 115(W) x 98(H)mm



7	Cat.	Qty 1+	Qty 3+	Qty 6+
Solder Station	TS-1440	\$299.00	\$269.00	\$239.00
Replacement sponge	TS-1445	\$7.95	\$6.95	\$6.25
0.5mm Tip	TS-1441	\$19.95	\$17.70	\$15.70
0.2mm Tip	TS-1442	\$19.95	\$17.70	\$15.70



SPARE TIPS FOR SUPERSEDED IRONS & STATIONS

TIPS TO SUIT TS-1425 100W SOLDERING GUN

<i>n</i>	Cat.	Qty I +	Qty 3+	Qty o+		
Pkt 2	TS-1426	\$7.95	\$6.95	\$6.25		
TIPS TO SHIT WELLER SOLDERING IRON (VARIOUS MODELS)						

						-,		
7	Weller Part	mm	°C	Cat.	Qty 1+	Qty 3+	Qty 6+	
	PTA6	1.6	315	TS-1352	\$19.95	\$17.70	\$15.70	

TIPS TO SUIT TS-1300 PORTASOL 50 GAS SOLDERING IRON



7	Туре	mm	°C	Cat.	Qty 1+	Qty 3+	Qty 6+
	Chisel	1.0	350	TS-1301	\$9.95	\$8.75	\$7.75
	Chisel	2.4	350	TS-1302	\$9.95	\$8.75	\$7.75
	Chisel	4.8	350	TS-1303	\$9.95	\$8.75	\$7.75

SOLDER

Duratech Solder

60% TIN / 40% LEAD

Two sizes available, 1.0mm and 0.71mm diameter

- 0.71mm is ideal for work with ICs and all fine soldering
- Both types are resin cored
 Hobbypacks are supplied in
- easy to use cannisters



Qty 1+ Qty 3+ Qty 6+

1KG ROLLS

71	Cat.	Qty 1+	Qty 3+	Qty 6+
0.71mm	NS-3002	\$54.95	\$49.45	\$43.90
1.00mm	NS-3015	\$54.95	\$49.45	\$43.90
200G ROLLS				
71	Cat.	Qty 1+	Qty 3+	Qty 6+
0.71mm	NS-3005	\$10.95	\$9.75	\$8.75
1.00mm	NS-3010	\$10.95	\$9.75	\$8.75

HOBBYPACK CANNISTERS

Contains 13-20 grains weight.				
7	Cat.	Qty 1+	Qty 3+	Qty 6+
0.71mm	NS-3008	\$1.85	\$1.65	\$1.45
1.00mm	NS-3013	\$1.85	\$1.65	\$1.45

Lead-Free Solders

99.3% tin, 0.7% copper lead-free. Sizes for every application from hobby to industry



200G ROLLS

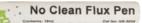
0.71mm	NS-3088	\$17.95	\$16.70	\$14.35
1.00mm	NS-3094	\$17.95	\$16.70	\$14.35
500G ROLLS				
7	Cat.	Qty 1+	Qty 3+	Qty 6+
0.71mm	NS-3090	\$42.00	\$39.45	\$33.45
1.00mm	NS-3096	\$42.00	\$39.45	\$33.45
HOBBYPACK CANNISTERS • Contains 15-20 grams weight.				

Cat.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
0.71mm	NS-3086	\$2.95	\$2.75	\$2.30
1.00mm	NS-3092	\$2.95	\$2.75	\$2.30

SOLDERING ACCESSORIES

Solder Flux Pen 12ml



A quick drying, no-clean flux for use when removing or replacing surface mount components. Applying the flux to solder joints will aid re-flow when heating the joint to remove the component, or it can be applied to bare copper or tinned tracks providing excellent solderability.

- Dries in 5 to 10mins.
- Handy 12ml pen with chisel tip.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	NS-3036	\$11.95	\$10.70	\$9.50

Solder Flux Gel 10g Syringe



A mildly activated, resin-based flux formulation developed for a wide range of applications, leaving a pin-probable residue. The superior wetting ability results in bright, smooth, shiny solder joints. It also has very low post-process residue, which remains crystal clear and probable even at the elevated temperatures required for today's lead free solders. Reduces or eliminates voiding and also offers high humidity tolerance and a chemistry developed for use in air reflow.

- 10g syringe packSuitable for lead-free solders
- · Probable residue

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	NS-3039	\$19.95	\$18.70	\$15.70

Plastic Desolder Tool



Has an ABS plastic body with strong suction. Unit is very easily cleaned, coming apart in seconds

• Total length inc. tip 195mm.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
Tool	TH-1860	\$11.95	\$10.70	\$9.50
Spare tip	TH-1861	\$3.95	\$3.45	\$3.15

Metal Desolder Tool



This desolder tool is made of lightweight metal and has strong suction.

- · Constant vacuum force
- · Automatically cleans itself with each action
- Very little recoil
- Replacement tip (Teflon)
- One hand operation
- Designed for long life
- A quality product
- Total length including tip 195mm

JAYCAR QUALITY

IAPANESE MADE

7	Cat.	Qty 1+	Qty 3+	Qty 6+
Tool	TH-1862	\$16.95	\$14.95	\$13.35
Spare tip	TH-1863	\$4.95	\$4.45	\$3.90

Deluxe GOOT Desoldering Tool



This is a high quality GOOT brand desoldering tool. It features Japanese built quality and a large vacuum chamber for extremely strong suction.

- Made in Japan
- Large vacuum chamber
- Total length: 330mm To

7	Cat.	Qty 1+	Qty 3+	Qty 6+
ool	TH-1856	\$27.95	\$24.95	\$22.35
pare tip	TH-1857	\$8.95	\$7.95	\$6.95

3mm Desolder Braid

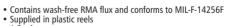
A specially treated piece of braid for removing solder from a PCB. Place the braid over the solder and apply soldering iron to efficiently remove solder. 3mm wide, 120mm long.



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	NS-3020	\$3.25	\$2.90	\$2.60

GOOT Desolder Braid

High quality Goot brand Gootwick, made in Japan



• 1.5m long



7	Cat.	Qty 1+	Qty 3+	Qty 6+
1.5mm wide	NS-3026	\$5.95	\$5.25	\$4.75
2.0mm wide	NS-3027	\$5.95	\$5.25	\$4.75
3.0mm wide	NS-3028	\$5.95	\$5.25	\$4.75

Soldering Accessories

SOLDERING ACCESSORIES (CONTINUED)

Solder Paste SMD Syringe 15G

Ideal for surface mount work and rework, solder paste provides a quick and easy soldering solution. Supplied in a syringe for easy application, simply apply it to the soldering pads, put your components in place and heat it with your soldering iron. Solder paste can go off in storage: we've found a local supplier so you can always be confident that the paste you get will be fresh. 63% tin 37% lead.

Solder paste is best kept cool for long life and should be kept refrigerated. For this reason, please ask sales staff for this product, as it will be kept in refrigerated storage, not on display.

Size: 15 grams
Dimensions: 120 (L) x 15mm (Dia)



NS-3046

\$12.95

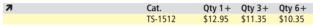
\$11.35

\$10.35

Soldering Iron Tip Cleaning Paste

Keep your soldering iron tip in the best possible condition. A healthy tip makes for easier soldering and better heat transfer. This tip contains powdered solder and non-corrosive flux, so all you need to do is dip your hot soldering tip in, and it will clean and tin in one simple action.

Supplied in a 15g tin

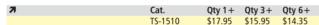


Goot Soldering Iron Tip Cleaner

This tip cleaner eliminates the temperature variation associated with the wet sponge approach and does a better job. The "curly brass" insert doesn't need to be kept wet and cleans without damaging the tip. Uniform iron temperature ensures consistent joint quality and reduces cycle times. It's made from a heavy-duty heat-resistant rubber base that won't slip around on the bench, is static-safe and is also suitable for lead-free solders.

· Supplied with spare insert

• Dimensions Insert: 45(Dia.) x 30(H)mm Overall: 58(Dia.) x 58(H)mm



Solder Sucker & Blower Bulb

A quick & simple bulb type solder sucker that is cheap, compact and effective. Buy two or three and you will always have one handy

Approximately 50(D) x 110(L)mm
Versatile! Suck or blow



Economy Soldering Iron Stand

General-purpose stand for just about any electronics soldering iron. It has a large, thirsty tip-cleaning sponge & pressed metal base.

- Spare sponge Cat TS-1503
 Base: 84(W)x 130(D) x 25(H)mm
- Holder: 105(L) x 40(W)mm
- · Complete height: 120mm

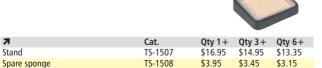
71	Cat.	Qty 1+	Qty 3+	Qty 6+
Stand	TS-1502	\$9.95	\$8.75	\$7.75
Spare sponge	TS-1503	\$2.75	\$2.45	\$2.15

Deluxe Soldering Iron Stand

Ideal for heavier soldering irons. It features a hefty cast iron base with removable sponge tray and twin spiral iron holder.

- Spare sponge: Cat. TS-1508
 Base: 78W x 115(D) x 30(H)mm
 Holder: 135(L) x 45(W)mm
- Complete height: 145mm

Stand



Solder Stand with Solder Reel Dispenser

Every technician needs one of these on their workbench! It will hold our solder reels and the solder is fed through the guide. It has a handle, so it can easily be carried, and it can be wall mounted to be right there where you always need it. The base is super heavy so even when the solder reel is nearly empty it will

- Also good for field service work
- Shaft diameter is 16mm
- Will hold our 1kg rolls
- Weight 620g
- Dimensions: 90(L) x 100(W) x 110(H)mm



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TS-1504	\$17.95	\$15.95	\$14.35

Solder Fume Extractor

Designed to remove dangerous solder fumes from the work area. Suitable for use in production lines, servic centres, R&D workbenches or the hobbyist. It incorporates a ball bearing high volume fan to maximise airflow which is directed upwards at the rear of the unit to aid in safe dispersion of fumes. ESD

Spare filter - sold separately Cat.TS-1581 • Dimensions: 260(H) x 200(W) x 170(D)mm

Don't pay silly prices elsewhere. This one works fine.

e :e	7	
D		k
	LIEFR WARRANTY	

7		Cat.	Qty 1+	Qty 3+	Qty 6+
	Fume Extractor	TS-1580	\$69.95	\$62.95	\$55.95
	Snare Filter	TS-1581	\$9.95	\$8.75	\$7.75

Soldering Iron Tripod Bench Stand

When you're tinning wires or soldering plugs and which you're tillning whee or soldering plugs afficient sockets, it's awkward trying to hold the soldering iron as well as balancing the item you want to tin, both at the same time. This stand is supported by a tripod so it's very stable and ideal for a soldering iron. Non-slip rubber grips under the tripod legs prevent slippage on your work bench or table. The stand's height can be extended to 250mm and the soldering iron can be positioned with the rotating holder. This product is far more stable than most 'hands free' holders.



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AM-4110	\$6.95	\$6.25	\$5.50

PCB Holder with Magnifying Glass

Any time you need that extra bit of help with your PCB assembly, this pair of helping hands will get you out of trouble. With a 90mm magnifying glass, it also provides an extra pair of eyes. Infinitely adjustable for height and any working angle you may need. The two alligator clips provide secure support for boards as small as 32mm wide. Mainly intended for PCB assembly, this handy tool can be adapted for countless other uses in the workshop or around the house.

• 3 x Magnification Dimensions:
 Base: 78 x 98mm Height: 145mm

PCB NOT INCLUDED

Cat.	Qty 1+	Qty 3+	Qty 6+
TH-1983	\$12.95	\$11.35	\$10.35

Stethoscope

of non-medical uses

Listen for mechanical noises in equipment A very handy diagnostic tool with plenty





7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-7255	\$14.95	\$13.35	\$11.70



ANTI-STATIC PRODUCTS

Static control - both in the workshop/factory and in the field - is becoming increasingly important for reliable manufacture, repair and or installation of large surface mount LSI based boards. We offer a complete line of static control products for virtually any situation.



Conductive Brush

This brush looks very much like a toothbrush. The handle is made from conductive plastic, and the comb from conductive nylon.



Use it to clean anything where static is a problem. • Resistivity: - 10^4 - 10^6 Ω .

• Length 178mm.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1775	\$9.95	\$8.75	\$7.75

Anti-Static Workplace Desk Mat

This anti-static mat measures 555(W) x 290(D)mm and is ideal for anyone who manufactures, repairs or services sensitive electronic equipment. It is about 3mm thick, has a hard wearing face over a dense sponge rubber base. Can also be used as an anti-static base for computer keyboard.

- Top colour is grey.See opposite for connecting leads.



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1783	\$19.95	\$17.70	\$15.70

Large Anti-Static Workplace Desk Mat

This anti-static dissipative desk mat will cover the whole top of a desk or work station.

It measures 1 metre x 0.5 metres x 3mm thick. The mat is grey in colour and made of anti-static foam plastic. The surface of the mat has a slight grain texture, whilst the underside has a checker pattern to prevent slipping on the bench top.

- Resistivity: Anti-static layer 108 10 10 Ω /inch. Conductive layer 10 4 10 6 Ω /inch.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1784	\$49.95	\$44.90	\$39.90

Desk Mat to Floor Mat

Use this lead if you are using both the floor mat and desk mat. (You will need to have grounded the floor mat). The anti-static wrist strap can then be plugged into this leads double adaptor. Lead has snap connectors both ends - one end with double banana socket (desk mat end).



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1792	\$13.95	\$12.35	\$10.95

Anti-Static Floor Mat

This anti-static floor mat is made from conductive PVC sheet combined with high density PVC foam. The top layer is grey with green fleck in colour, and the bottom is black. Resistivity is: 10^9 - 10^{11} Ω /inch for the top layer, and 10^4 - 10^6 Ω /inch for the hottom layer

- . Size is 2 metres x 1 metre x 2mm thick
- See below for grounding leads.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1786	\$199.00	\$178.95	\$158.95

Anti-Static Wrist Strap

Use when static electricity is a problem when soldering, changing ICs and installing expansion cards in computers etc. Static charges can destroy ICs instantly. Consists of adjustable Velcro wrist strap, coiled lead and banana plug/alligator clip.

· Expanded lead length about 1.8m



Anti-Static Wrist Strap

Similar to the unit above, this strap has an extra long coiled lead of 3m/10ft extender. This makes it ideal for moving about your workbench without having to unclip yourself to do so. An elasticised wrist strap is also included, along with banana plug/alligator clip.

			-	
7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1781	\$17.95	\$15.95	\$14.35

Desk Grounding Cable

This lead is to ground workplace desk mats. It clips over the stud fastener on any mat. and has a receptacle for 2 banana plugs. The other end of the lead has a banana plug, and an alligator clip that slips over the banana plug for earth connection. The anti-static wrist strap then plugs into the socket above the stud fastener clip. 2 wrist straps can be plugged in if required.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1791	\$13.95	\$12.35	\$10.95

Anti-Static Field Service Mat / Bag



This mat is ideal for field service people, who need an anti-static work area when on the move. The mat folds out to a work area of approximately 600×600 mm. At one end there are 2 pouches, and a ground lead and wrist strap are included. A very useful tool.

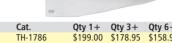
• Pouch size approx: 200 x 300mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1776	\$49.95	\$44.90	\$39.90

Grounding Cable

Cable length approximately 3 metres.

Cat.	Qty 1+	Qty 3+	Qty 6+	7	Cat.	Qty 1+	Qty 3+	Qty 6+
TH-1792	\$13.95	\$12.35	\$10.95		TH-1776	\$49.95	\$44.90	\$39.90









· Colour may vary.



PCB EXPERIMENTING & PROTOTYPE

PC Boards - Vero Type Strip

Alphanumeric grid, pre-drilled 0.9mm, 2.5mm spacing.



7	Cat.	Qty 1+	Qty 4+	Qty 10+
76mm	HP-9540	\$4.50	\$3.95	\$3.60
152mm	HP-9542	\$7.95	\$6.95	\$6.25
303mm	HP-9544	\$11.50	\$10.35	\$8.95

Universal Pre-Punched Experimenter's Boards

The low cost way to build prototype or one-off projects. We now stock 3 sizes of phenolic board that has a matrix of punched holes on 0.1" (2.5mm) pitch with 'donut' of tin plated copper around each hole. Finally the non-solder side of the board has an alphanumeric grid printed on it to assist in the component identification board layout.



95 x 72mm, 25 x 30 holes (750) 3.6mm edge pitch.

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	HP-9550	\$4.50	\$3.95	\$3.60

140 x 95mm, 29 x 50 holes (1450) 2.5mm edge pitch.

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	HP-9552	\$6.95	\$6.25	\$5.50

210 x 78mm, 24 x 67 holes (1608) 3.6mm edge pitch.

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	HP-9554	\$8.95	\$7.95	\$6.95

Unclad Punched Laminate

A single 150(L) x 70(W)mm strip of phenolic punched at 0.1" (2.5mm) grid with NO laminate (copper) on either side.



71	Cat.	Qty 1+	Qty 4+	Qty 10+
	HP-9562	\$5.50	\$4.90	\$4.30

Ultra Mini Experimenter's Boards

20 holes deep by 16 holes wide with "links" and "strips" (bus rails) every 2 holes. Board measures a compact 65 x 45mm and is extremely versatile. Supplied as a pair, end-to-end. Can be snapped apart to make two boards (dimensions above) or one 130 x 45mm 0.3" wide x 0.1" pitch.



Close up

Ideal for DILICs in small numbers.

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	HP-9556	\$4.95	\$4.45	\$3.90

IC Experimenter's Board

You can fit dozens of DIL ICs on this board. 30 holes deep x 50 holes wide, with a "link"/"strip" (bus rails) pattern enabling alternate V+ and earth rails. Very versatile.



• Dimensions: 140 x 95mm

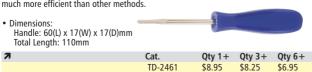


Close up

7	Cat.	Qty 1+	Qty 4+	Qty 10+	
	HP-9558	\$6.95	\$6.25	\$5.50	

Spot Face Cutter for Strip Boards

The spot face cutter is designed to neatly remove copper strip on strip type prototyping boards. Insert the tool in the pre-drilled hole and rotate it until the track is removed entirely. Easy to use and much more efficient than other methods.



Mini Breadboard

One terminal strip supplied which gives 30 holes x 10. Total 300 holes.



• Dimensions: 39(W) x 87(L)mm

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	PB-8832	\$9.95	\$8.75	\$7.75

Breadboard

- 840 tie points
- 200 distribution holes
- 640 terminal holes (Simply a combination of 2 x Distribution strip + 1 Terminal strip)

 Dimensions: 65(W) x 175(L)mm 				
7	Cat.	Qty 1+	Qty 4+	Qty 10-
	PB-8814	\$19.95	\$17.70	\$15.70

Breadboard

- 1680 tie points.
- 400 distribution holes
- 1280 terminal holes.
- Mounted on a metal plate.
- 3 hanana terminals
- Rubber feet. • Dimensions: 157(W) x 237(H)mm.
- Board size: 130(W) x 175(H)mm.

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	PB-8816	\$39.95	\$35.90	\$31.90

Breadboard Jumper Kit

This kit consists of 70 pcs of single core sturdy wire which has been stripped on each end and bent at right angles.

- Specifically made for breadboardsThere are 5 pcs each of 14
- different lengths.



Cat.

Economy Breadboard Jumper Kit

Solid core hookup cable, which is the ideal size for breadboards. Cut it to whatever lengths you require and strip the ends.



• •				
71	Cat.	Qty 1+	Qty 4+	Qty 10+
Per Pack	WH-3032	\$3.45	\$3.05	\$2.70

Aluminium Sheet

18 gauge 295 x 295mm



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	HM-9500	\$13.95	\$12.35	\$10.95

Perspex - Red or Grey

- 195 x 195mm.
- 3mm thick.
- Supplied with peel-off film

7	Cat.	Qty 1+	Qty 4+	Qty 10+
Red	HM-9505	\$13.95	\$12.35	\$10.95
Grey	HM-9507	\$13.95	\$12.35	\$10.95

Clear Acrylic Sheet

General purpose clear acrylic (Perspex) sheet for hobby use. Suitable for displays etc.

Dimensions: 195 x 195 x 3mm

 Supplied with peel-off protection film 7 Qty 4+ Qty 10+ HM-9509

Thermal Transfer Tape 100 x 100 x 0.5mm - Pack 2

When it comes to attaching devices like star LED modules to heatsinks, it's often not easy as they don't have screw "eyes" like a TO-220 transistor package. The material is self adhesive and provides good thermal conductivity making it easy for chipsets, LED modules, memory modules etc.

• 2pcs of 100mm x 100mm sheets supplied. 0.5mm thickness

· Supplied with peel-off protection film

Supplied that peer on protection initial					
Specifications					
Thermal conductivity	1.6 W/m-k				
Flammability level	UL94V-0				
Working temperature range	-60 to +250°C				
Insulation strength	>7,000V/mm				



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	NM-2790	\$12.95	\$11.35	\$10.35

PCB EXPERIMENTING & PROTOTYPING (CONTINUED)

Riston UV/PCB Developing System

This is basically blank printed circuit board, with a photo-resist. A photo-resist is a coated chemical that changes composition when exposed to light. The PCB Riston is placed on a flat surface, and your negative artwork is then sandwiched between a sheet of glass and the Riston PCB. You can expose the PCB pattern and board in broad daylight, however a controlled source of UV is recommended. After the recommended exposure time, you remove the PCB pattern. Where the Riston was in shadow the photo-resist will not have changed chemical composition. Where it has been exposed it will. You then apply the Developer (HG-9964) to complete the process. The copper tracks will still have the Riston present, and this must be removed with Stripper CRS-40 (HG-9968).

Riston PCB

Blue negative acting. FR4 fibreglass material.

Single sided



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	HG-9970	\$24.95	\$22.35	\$19.70

152 X 305MM

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	HG-9972	\$59.95	\$53.95	\$47.90

Riston Stripper & Developer

Stripper required to clean board before soldering.

600ml bottle



7	Cat.	Qty 1+	Qty 4+	Qty 10+
Stripper	HG-9968	\$9.95	\$8.75	\$7.75
Developer	HG-9964	\$7.95	\$6.95	\$6.25

CRS-40/5

Etch Resistant Pen (Dalo Pen)

This looks like a normal felt tip

pen but it isn't. You simply
draw on a clean piece of blank copper
clad PCB. The ink from the pen is etch resistant so you have a quick and simple way of making that PCB! The ink will wash off afterwards with metho, turps, etc.

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	TM 2000	¢0.05	¢0.75	¢7.75

PCB Etching Kit

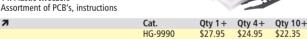
An ideal kit for anyone needing to etch a circuit board - complete with an assortment of copper boards, etchant, working bath and tweezers. It also includes a positive acting photosensitive PCB and developer.

Supplied with: 1 x Plastic bath to accept PCBs

up to 180 x 110mm 1 x Photosensitive single sided PCB

- 1 x Sachet of positive developer for Riston 1 x 100g sachet of sodium persulphate etchant

1 x Plastic tweezers



Ammonium Persulphate - 400gm

The alternative to ferric chloride. Mix contents (400 grams) with 1.5 litres of hot water to etch copper boards. The contents will treat about 500sq/cm of PCBs.



ing Your Own PC hoards

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	NC-4254	\$12.95	\$11.35	\$10.35

Etch Your Own PC Boards Booklet

Need just one or two printed circuit boards, for a magazine project or a prototype for your latest design? It's not too hard to etch your own single sided or even double sided boards, especially if you have access to a photocopier or a PC and laser printer. In this tech update we tell you all you need to know.

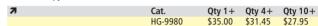


	,
Cat.	Qty 1+
BI-8212	\$2.00

This is by far the easiest way to make Printed Circuit Boards from CAD software or magazine PCB layout artwork. You simply make the PCB image by putting a Press 'n' Peel sheet of transfer film in the paper tray of a photocopier or laser printer (The sheet size is almost the same as the A4 paper tray). You then print or copy the PCB track image onto the film. Using a domestic clothes iron you press the image onto a precleaned piece of copper clad PCB. The image transfers to the copper and the image will not etch away. Ammonium persulphate or ferric chloride are both OK. You get 5 sheets of 215 x 280mm transfer film in each pack. Full instructions are supplied

4 Easy Steps:

1. Print or Conv. 2. Iron on 3. Peel off 4. Etch



USA

Blank Fibreglass PCB

Pure copper bonded to quality fibreglass base.
• HP-9514, 9512, 9510 are single sided
• HP-9515 is double sided

Press 'n' Peel Film



∌ mm	Cat.	Qty 1+	Qty 4+	Qty 10+
150x75	HP-9514	\$5.95	\$5.25	\$4.75
150x150	HP-9512	\$8.95	\$7.95	\$6.95
150x150	HP-9515	\$9.50	\$8.50	\$7.50
300x300	HP-9510	\$19.95	\$17.70	\$15.70

Deoxit ProGold Contact Cleaner & Rejuvenator

Simple cleaners wash away dirt, grime, and dust from your expensive equipment but are often ineffective at cleaning tough oxidation and metal sulphide contamination. This product will not only clean, but it will help restore your equipment to its original condition, improving its performance

Kit contains: DeoxIT power booster 7.4ml DeoxIT ProGold conditioning treatment 7.4ml 2 x brush applicators 4 x swahs

Lint free cloth





Qty 4+	Qty 10+

7	Cat.	Qty 1+	Qty 4+	Qty 10+
Aerosol	NS-1434	\$24.95	\$22.35	\$19.70
Kit	NS-1436	\$24.95	\$22.35	\$19.70

Silver Conductive Pen

This is a highly conductive polymer for use in a variety of applications and is an indispensable tool for fixing damaged circuit board tracks. The pen can also be used to draw new tracks on circuit boards, making jumpers, or even designing prototype circuit boards. It is suitable for use on most surfaces and has excellent adhesion and abrasion resistance properties. Tracks can even be soldered after heat curing.

7

0.02 Ohm per mm resistivity		Circu	iitWr	iler
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	NS-3033	\$29.95	\$26.90	\$23.70

Silver Conductive Varnish

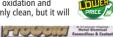
This silver conductive varnish adheres well to glass, PCB material, ceramics etc. Repairs printed circuits, window antennas, window alarm loops etc. Very good conducting properties.

Approximately 0.02 - 0.1 Ohms/cm²

Qty 4+ Qty 10+ NS-3030 \$12.95 \$11.35

ProGold Contact Protector Pen Style

Simple cleaners wash away dirt, grime, and dust from your expensive equipment but are often ineffective at cleaning tough oxidation and metal sulphide contamination. This product will not only clean, but it wil help restore your equipment to





RELATED PRODUCT

its original condition, improving its

For solder, lead free solder, solder paste and flux see page 126.

PCB Accessories & Tools

PCB EXPERIMENTING & PROTOTYPING (CONTINUED)

Benchtop Work Mat

Protect your benchtop. This durable A3 size PVC cutting mat is just the thing to protect your work benchtop. You can cut on it, solder, write on it, and not damage your workplace. The mat is 3mm thick, and measures 450 x 300mm.



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	HM-8100	\$12.95	\$11.35	\$10.35

Polymorph Pellets

Polymorph will change the way you make parts. It's a commercial grade thermoplastic that softens enough to be formed into any shape at around 62 - 65° C. You simply heat the pellets in hot water. It hardens at room temperature to form a tough plastic material similar in consistency and colour to Nylon. It can be drilled, sanded, ground, machined, painted or heated and reformed again and again. Endless uses in model making, craft, single part manufacture, prototyping, engineering, science, lab and more. Supplied in a 100g bag of 3mm pellets.



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	NP-4260	\$11.50	\$10.35	\$8.95

Component Lead Forming Tool

Get the hole spacing for your resistors and diodes perfect every time. This handy forming tool perfect every time. This hardy forming tool provides uniform hole spacing from 10 to 38mm. Suitable for production assembly, education and training. The tool is double sided with one side for use with DO47 outline diodes (eg 1N914) and 1W zener diodes; the other side being suitable for 1/4W resistors, DO41 outline diodes (eg 1N4004) An



incredibly handy tool!	ies (eg mi ioo i).	=		
Dimensions: 138(L)mm Made in USA from engineering	plastic.			
	Cat	Otv 1 +	Otv 3+	Otv 6+

TH-1810

Universal IC Pin Straightener

A simple and effective tool to straighten and align bent IC pins. Accommodates standard ICs from 8 to 48 pins.



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1814	\$11.95	\$10.70	\$9.50

Pin Extractor Press

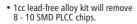
A handy little pin-extractor/inserter press with a 0.8mm punch. Mainly intended for taking links out of watch bands, but endless other uses for jewellery making, modelmaking and hobbies.

- 2 spare pin punches
- · Assortment of 12 pins

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-2014	\$9.95	\$9.25	\$7.75

Chip Quik SMD Removal Kit

Desoldering SMD chips can be very tedious and Desoldering SMD chips can be very tedious and risky. Most of the time you don't even bother due to the risk of destroying the component or lifting the tracks on the PCB. Chip Quick is a low melting point solder product that maintains the molecular state of a row of pins. It even works on PLCC chips. Essential rework tool for anyone who uses SMD components



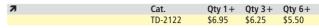


7	Cat.	Qty 1+	Qty 3+	Qty 10+
	NS-3050	\$29.95	\$26.90	\$23.70

Soldering Heatsink & Component Holder

This quality small tool is ideal as a heatsink when soldering to remove some of the heat from the semiconductor/component while soldering. It can also be used to hold small parts while soldering to avoid burnt fingers.

Supplied with insulated handles, and length is 65mm.



IC Extractor

Deceptively simple looking device.

- · One piece metal construction
- 8 40 pins

a	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1818	\$2.95	\$2.60	\$2.30

PLCC Extractor

There's really only one way to remove a PLCC safely - and this is it. Basically a spring assisted clip carrier extractor, specifically designed for the safe and hassle free removal of PLCCs from sockets.



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1816	\$11.95	\$10.70	\$9.50

Pin Extraction Tool

Take the frustration out of removing Molex connector pins with these time saving tools. Simply slide the tool over the connector and push the plunger to effortlessly remove the pin. Both male and female pin extractors available.

Male Pin Extractor TH-1730 Female Pin Extractor TH-1732

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1730	\$17.95	\$15.95	\$14.35
	TH-1732	\$17.95	\$15.95	\$14.35

Budget SMD Vacuum Pickup Tool

This handy workshop SMD component pickup tool fits into your pocket and uses vacuum pressure to pick up your sensitive components without damaging them. An amazingly useful tool!

- Easy to use, one-hand operation.
- Picks up to 20g in weight.Supplied with 3 vacuum pads.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1978	\$17.95	\$15.95	\$14.35

Pearl Catch

Incredibly handy tool for those moments when you need to pick up small fiddly bits and pieces.



- Will clip to and hold small nuts, bolts, washers, transistors, resistors, etc
- Metal construction

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1842	\$9.95	\$8.75	\$7.75

Anti-Magnetic Precision Tweezers

These are high quality tweezers made from anti-magnetic, anti acid steel. Perfect for handling SMD components, jewels or general electronic components.

Length 110mm.
 Supplied with protective nylon cap

TH-1754 \$4.45 \$3.95 \$3.45	7	Cat.	Qty 1+	Qty 3+	Qty 6+
		TH-1754	\$4.45	\$3.95	\$3.45

Stainless Steel Tweezer Set - ESD Safe

A set of 3; duckbill head, angled fine and straight superfine enable you to manipulate surface mount components or other tiny items with ease. ESD coating on main body of tweezers greatly reduces static discharge

· Measures: Angled & duckbill 120mm, superfine 135mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1760	\$19.95	\$18.70	\$15.70

PCB EXPERIMENTING & PROTOTYPING (CONTINUED)

Stainless Steel Tweezer Set

A set of 4 tweezers, three supplied with vinyl handles, comprising:



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1752	\$8.95	\$7.95	\$6.95

4 Piece Mini Pick & Hook Set

These hook tools have stainless steel heat treated points, and are ideal for use on O-rings, springs, snap rings, washers, checking soldering joints, general hobbyist kit building, and probing

into things, etc.

Hooks are:

straight pick90° hook

full hook

small angle hook.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1762	\$15.95	\$14.35	\$12.70

10 Piece Alignment Tool Set

Set of 10 low cost plastic alignment tools.

Length 114mm



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1806	\$6.95	\$6.50	\$5.50

Artwork Knife

Light duty precision knife with safety cap. Ideal for fine angle cuts, etching, hollowing, scoring, scraping, scribing, stripping and trimming. Four piece jaw chuck method of blade retention.



Scriber

This pen type tool will scribe on metal, glass, plastic, ceramics and tools. Stylus is made of tungsten steel. Looks like a pen, and has a pocket clip. Length 110mm.



71	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2120	\$7.95	\$6.95	\$6.25

Automatic Centre Punch

This handy tool allows you to make a centre punch mark with one hand. You simply hold the unit against where you would want a centre punch mark, apply downward pressure until the internal hammer mechanism trips. The pressure is adjustable depending on the hardness of the surface. Sturdy brass body with hardened steel centre punch. 125 mm long overall.



Benchtop Work Mat

Protect your benchtop. This durable A3 size PVC cutting mat is just the thing to protect your work benchtop. You can cut on it, solder, write on it, and not damage your workplace.



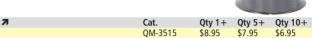
7	Cat.	Qty 1+	Qty 3+	Qty 6+
	HM-8100	\$12.95	\$11.35	\$10.35

LABORATORY MAGNIFIERS & LAMPS

Eye Magnifier

This 3 times magnifier is handy for checking PC boards, looking at stamps or coins, jewellery, etc, etc.

Every hobbyist should have one.
Dimensions: 28(H) x 22(dia view area) x 40(dia base)mm.





Qty 1+ Qty 5+ Qty 10+ Cat. QM-3531 \$8.75

See our range of Digital Mobile Microscopes on page 25

Magnifying Glass

This huge 4.5" diameter viewer allows hands free operation. It will fold into a neat and easy to store package.



7	Cat.	Qty 1+	Qty 5+	Qty 10+
	QM-3505	\$10.95	\$9.75	\$8.75

Paperweight LED Magnifier

Keep one on your desk for those times when you can't find your reading glasses. It will keep your errant papers under control and give you a 70mm diameter 4x magnifier so you can read them easily. With 4 LEDs for illumination and powered by a CR2032 battery.

- Case and battery included
 Dimensions: 100(Dia) x 50(H)mm



7	Cat.	Qty 1+	Qty 5+	Qty 10+
	QM-3538	\$24.95	\$22.35	\$19.70

LED Headband Magnifier

This magnifying headset leaves both hands free and can be worn over prescription or safety glasses. It also has a built-in LED light that can be rotated up, down or side to side to illuminate your work. There are three lenses that can be used in combinations to give 1.5x, 3x, 8.5x or 10x magnification. The head strap is fully adjustable and locks into position and the lens assembly can be swivelled up out of the way when not in use. A multitude

of uses including lapidary, jewellery, model-making, electronics and camera repair.

Requires 2 x AAA batteries





OM-3511 \$29.95 \$26.90 \$23.70

Magnifying Lamps

LABORATORY MAGNIFIERS & LAMPS (CONTINUED)

Magnifying Lens with LEDs

Ideal for the elderly or vision-impaired. Keep one in the glovebox for reading the street directory in the dark.

- Big, clear 90mm lens illuminated by two LEDs
- Requires 2 x AAA batteries
 Dual magnification: 3X & 5X





7	Cat.	Qty 1+	Qty 5+	Qty 10+
	QM-3537	\$14.95	\$13.35	\$11.70

10x LED Magnifier with Scale

With all metal construction and glass optics, this superb little magnifier provides 10 dioptre magnification with razor-sharp clarity. Inside the viewer is a graduated scale in metric and imperial graduations so you can actually take measurements of an object down to fractions of a millimetre. Three LEDs and the 26mm eyepiece provide crystal-clear even illumination of the subject. Ideal for checking PCBs in

pre-production, lab, science, education or engineering applications. 2x AA batteries included.

- 10x magnification All metal construction
- Satin chrome finish
- Ground glass optics
- Dimensions: 180(L)mm



7	Cat.	Qty 1+	Qty 5+	Qty 10+
	OM-3539	\$29.95	\$26.90	\$23.70

6/12 LED Magnifying Glass

Extremely robust, this is not the kind of magnifier you keep in the desk and bring out occasionally. All metal construction makes it ideal for the lab, workshop or photography studio. The high quality glass lens provides superior optics. 12 LEDs ensure ample illumination for your work and can be switched to a low power setting of 6 LEDs.

- Zip nylon carry case85mm lens diameter
- 3.5x dioptre magnification
- Requires 2 x AA batteries
- Dimenesions: 240(L) x 110(Dia.)mm

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	QM-3534	\$39.95	\$35.90	\$31.90

Illuminated Gooseneck Magnifier

The gooseneck magnifier is a valuable accessory for coin/stamp collectors, photography etc. The 2X main lens and 5X insert lens with the bonus of 2 LED lights, is a welcome addition for any hobbyist. The magnifier is clip-on or free standing. Suitable for most flat surfaces or workplace incline up to 38mm thick. The flexible metal arm ensures that you can position the magnifier just where it's needed

This handy magnifier also comes with a soft protective pouch for your lens to protect it from dirt and dust. It also has metal stablisers to ensure that your magnifier remains stable while working.



- · Stands 225mm high
- Includes protective lens pouch
 Lens Diameter: 110mm
- Requires 3 x AAA batteries

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	QM-3532	\$29.95	\$26.90	\$23.70

Desktop Lab LED Magnifying Lamp

No more fluorescent tubes to replace on your maggy lamp. Sixty LEDs provide ample illumination, perfectly even light and the 3x and 12x magnifying lenses show all the detail you need. Being LED, there's no delay in startup and they'll never need replacing. Ideal for hobbies model making or jewellery.

- Dimensions: 320(H)
 - x 95(Dia.)mm
- Lens Dia. 100mm



Cat. Qty 5+ Qty 10+ QM-3544 \$44.90

For spare fluro tube for superceeded lamps see page 439.

LED Laboratory Magnifier Lamp

Clearly see what you're working on with this multifunctional laboratory magnifier. It contains 20 high-performance white LEDs to illuminate the subject, and a wide 127mm diameter glass lens that provides 2 dioptre magnification. Included is an extension pole that transforms it from a desk top unit into a floor standing unit, also included is a detachable peg type clamp for clipping onto a desk or shelf. Can be powered with the provided plug pack or 4 x C size batteries which allows this unit to be used where mains is not available. Once assembled, you can position the gooseneck to a variety of angles and switch on. A very versatile unit.

- 2 dioptre magnification
- 127mm diameter lens
- 1200mm floor mode height 600mm desk mode height
- Mains plugpack included
- Base dimensions: 310(L) x 230(W)mm







Desk Mount LED Laboratory

Magnifier Lamp This is a high quality, all metal frame construction magnifier which features 90 super bright LEDs inside the magnifier head. The magnifier itself is made of glass and is a 3 dioptre lens, with a metal handle for quick repositioning. A thumb screw positioned in between the two flexible extension arm assemblies (total extended length



- 3 dioptre magnificationLens size: 125mm
- Light source: 90 LEDs
- Mains powered
- Total extended length 990mm

Cat.	Qty 1+	Qty 5+	Qty 10+
QM-3546	\$119.00	\$106.95	\$94.95
			Cat. Qty 1+ Qty 5+ QM-3546 \$119.00 \$106.95



ADHESIVES / CLEANERS

J-B Weld Epoxy

The world's finest cold-weld compound. It's an easy, convenient and inexpensive alternative to welding, soldering and brazing. It's a two-part epoxy resin and when mixed





together forms a compound as tough as steel. Use it as adhesive, plug filler, sealant or electrical insulator. Like metal, it can be formed, drilled, ground, tapped, machined, filled, sanded and painted. It has an open time of about 30 minutes sets in 4-6 hours, and cures fully in 15-24 hours. It's waterproof, petroleum, chemical, and acid-resistant; resists shock, vibration and temperature variations. Super strong, non-toxic and cleans up with soap and water before setting. Bonds almost any combination of iron, steel, copper, aluminium, brass, bronze, pewter, porcelain, ceramic, marble, glass, PVC & ABS, concrete, fibreglass, wood, fabric - just about any porous/non-porous material

- Mechanical properties (kPa): Tensile strength: 27300 Adhesion: 12400 / Tensile Lap Shear: 7170
 Shrinkage: 0% / Heat resistance: 260° Celsius
- Contents: 25ml

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	NA-1518	\$14.95	\$13.35	\$11.70

Epoxy Bond 34ml



Two part epoxy resin-based adhesive recommended for use where a quick set high-strength adhesive is required. Bonds in approximately 4 minutes to give a colourless, permanent bond. Maximum strength after 1 hour. Ideal for rigid plastics, metal, glass, concrete, china & pottery. Supplied in dual tubes.

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	NA-1510	\$4.95	\$4.45	\$3.90

UGlu Industrial Glue Strips

Make quick repairs without tools. Simply cut a strip to the size you need, then fix iust like doublesided tape to create a permanent, instant bond. Bonds to just

about anything - carpet, plastic, canvas, wood, metal, tile, plasterboard, cement, paper, glass, even on rough surfaces. Non-toxic, acid free, no mess. Millions of uses at home, office and workshop. Pack contains eight 75 x 30mm strips.

- · Instant bond, permanent hold
- Waterproof and weatherproof Removable - Safe for kids to use
 Made in USA

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	NA-1522	\$7.95	\$6.95	\$6.25

3 Second Super Glue



Ideal for plastics, wood, rubber, glass, metal and ceramics. It sticks in seconds and needs no clamping Supplied in a small tube of 3 grams.

7	Cat.	Qty 1+	Qty 4+	Qty 10+	
	NA-1500	\$1.90	\$1.70	\$1.50	

Liquid Electrical Tape/Thread Locker

118ml CAN

This liquid can be used instead of insulation tane Simply brush it on and it will insulate and seal out moisture. Once dry, it is acid & salt resistant and won't crack, peel or harden even under extreme conditions. This is a very versatile product and can be used for such diverse applications as stopping Starbrite screws from vibrating loose or ropes unravelling. LIQUID



7	Cat.	Qty 1+	Qty 4+	Qty 10+
Black	NM-2832	\$24.95	\$22.35	\$19.70
Red	NM-2834	\$24.95	\$22.35	\$19.70

28g TUBES

- Handy 28g tube. Available in
- two colours



7	Cat.	Qty 1+	Qty 4+	Qty 10+
Black	NM-2836	\$12.95	\$11.35	\$10.35
Red	NM-2838	\$12.95	\$11.35	\$10.35

Wire Glue

A soldering iron in a jar. Wire Glue is a electrically conductive adhesive that enables you to make solder-free connections when you don't have a soldering iron handy, or aren't able to apply heat for some reason. Hundreds of hobby, trade and electronics uses Lead-free, cures overnight.



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	NM-2831	\$9.95	\$8.75	\$7.75

Wire Glue

Corrosion Buster Pen

This pen-type product enables you to remove rust, spot corrosion and clean burnt contacts etc, without abrasion utilising the 20,000 tiny glass fibres at the tip of the pen. It has an amply sized body with finger indent to provide a comfortable & secure grip while the adjustable length allows for more aggressive cleaning when required.

• 120mm long x 14mm dia



Heatsink Compound -5 Gram Tube



Non electrically conductive adhesive heatsink compound 5g tube - one 5g tube will adhere up to 16 TO-3 package transistors

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	NM-2014	\$7.95	\$6.95	\$6.25

Polyurethane Potting Compound

This potting compound is composed of a polyurethane base which is designed to electrically insulate and protect against dust and moisture. It features good thermal conductivity along with superior adhesion to various metals and plastics requiring encapsulation.

- · Allow 15 minutes for setting time
- Cures in around 4-5 hours
- 70ml

TAPE

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	NM-2016	\$9.95	\$8.75	\$7.75

Isopropyl Alcohol 99.8% Spray

Isopropyl alcohol is one of the most useful service aids you can have around. It has many of uses such as head cleaning, surface cleaning and prep, contact cleaning, stain removal in the laundry etc. It's also a medical-grade surface disinfectant and is ideal for cleaning your windscreen before you put your new rego label on Easy to use pump pack spray bottle & dries quickly.



- 99.8% concentration
- 250ml bottle Cat. NA-1066
- 300 gram Aerosol Can Cat. NA-1067

7	Cat.	Qty 1+	Qty 4+	Qty 10+
250mL	NA-1066	\$8.95	\$7.95	\$6.95
300g	NA-1067	\$9.95	\$8.75	\$7.75

Isopropyl Alcohol Cleaning Pads

Removes contaminants from metal, plastic & painted surfaces.

- Also ideal for
- cleaning computers
 Packet of 10.

Pkt 10

Cat.

NA-1060





Conductive Carbon Grease

Lubricates and improves electrical and thermal connections between sliding surfaces, while providing protection from moisture & corrosion. Excellent for use on switches and EMI shielding applications. Industrial, trade and hobby use. 50 gram tube.

- Prevents normally closed switches from corroding in place.
- · Reduces make-break arcing and pitting of switch contact surfaces
- Improves the connection between irregular or pitted contact surfaces
 • Reduces EMI noise by maintaining a
- continuous path between conductive surfaces
- Thermally stable up to 200°C
 Density: 2.7 g/ml
 Electrical resistivity: 117 ohms/cm

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	NA-1034	\$9.95	\$8.75	\$7.75

Inox Premium Grade Machinery Grease



General-purpose synthetic grease in a handy 30gm tube size. Ideal for bearings, ball joints, chains, sprockets, Orings, bushes & other rubber and plastic etc.

- Food grade
- High temperature, non-melt
 Highly resistant to water, salt, chemicals and drying
- Fully synthetic
- 30 gram tube

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	NA-1032	\$7.95	\$6.95	\$6.25

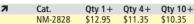
TAPE

Coax Seal Tape

This versatile material looks like ordinary PVC electrical tape but is actually a handy sealing system that fuses together to form a removable, waterproof seal once it has been applied. The tape has many uses such as waterproofing outdoor coax connections, sealing low pressure vacuum lines, or even as an alternative to heat shrink tubing when access is difficult.

• 12(W)mm x 1.5(L)m Used by NASA & US Military





PVC Insulation Tape - 20m

High quality insulation tape suitable for wrapping electrical wires.

- · Tape thickness: 0.18mm
- Roll Length: 20m
- Self-Extinguished within 2 seconds after being on fire

 Voltage breakdown: 8.0kV NM-2852 - Yellow/Green

NM-2853 - White NM-2854 - Red NM-2855 - Blue NM-2856 - Black



PVC Insulation Tape NITTO DENKO

Top quality PVC tape.

- Two sizes and six colours available.
- 18mm wide.



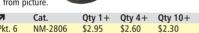
7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
Black	5m	NM-2800	\$0.78	\$0.70	\$0.60
Blue	20m	NM-2801	\$2.25	\$1.95	\$1.80
Red	20m	NM-2802	\$2.25	\$1.95	\$1.80
Black	20m	NM-2803	\$2.25	\$1.95	\$1.80
White	20m	NM-2807	\$2.25	\$1.95	\$1.80
Ylw/Gr	120m	NM-2804	\$2.25	\$1.95	\$1.80

Insulation Tape - 5m 6 Pack

Contains one roll each of black, white, red, blue, yellow and green.

 19mm wide Each 5 metres in length.





Heavy Duty PVC Tape - 33m

Cordon off hazardous areas or create an unmistakable marker with this heavy duty PVC tape. The vivid colouring will draw anyone's attention to the harrier Size: 50mm

Red/White Cat NM-2864

7	Cat.	Qty 1+	Qty 4+	Qty 10+
33m	NM-2864	\$9.95	\$8.75	\$7.75

Silicone Rescue Tape - Gaffa Tape on Steroids

Rescue tape is a self-fusing tape made of the highest quality materials for a permanent air-tight and water-tight seal in emergency situations. Just wrap it around a troublesome leak and it will bond in seconds. The tighter you stretch the tape, the quicker it will bond. Brilliant!

7

25m

- Resists fuels, oils, acids, solvents, salt water, road salt, UV rays
 Remains flexible to -60°C (-85° F)
 Operating temperature range: -65°C to 260°C / -85°F to 500°F

- Continuous temperature range: -60°C to 200°C / -76°F to 392°F Cold brittle point: -85° F / -65° C
- Tensile strength (Min.): 700 psi
- Elongation (Min.): 300% Tear strength (Min.): 85 pp
- Bond strength (Min.): 2 Lbs
- Water absorption (Max.): 3% By Weight
 Dielectric strength (Min): 400 volts/mil (8,000 V/20 Mil)
- Measures 1" x 12 FT (Approx: 25.4mm x 3657.6mm)

Cat. Qty 1-NA-2829 \$19.95

Self Amalgamating Tape - 10m

This insulating tape will "cure" into a single mass (once applied) to help seal and waterproof cable, wires or even The tape has good corona resisting properties and can be used on high voltage cables. Useful where water and chemical resistance is important.

- Corona resistant.
- Chemical resistant
- Self amalgamating. Length: 10 metres.



Easy-Tear Magnetic Mounting Tape

Ideal for craft projects, calendars, kids' artwork or to-do lists. Simply apply tape to a supporting surface and another piece to the item, then stick it anywhere you like. The adhesive can be removed without residue from any smooth surface - glass, wood, plastic etc. No cutting is needed as the tape simply tears to length, so it's completely



 Residue-free · Easy tear-off, no scissors

safe, even for littlies.

3m x 12mm roll

7	Cat.	Qty 1+	Qty 6+	Qty 20+
	LM-1608	\$5.95	\$5.25	\$4.75

Nashua Gaffer Tape - 40m

PREFERRED BY THE PROFESSIONALS Genuine Nashua brand Gaffer tape Professional quality 40 metre rolls in both black and silver. Leaves no residue behind and sticks to most clean surfaces, including carpet. 50(W)mm x 40(L)m. Ideal for

- · Outdoor concerts.
- Display exhibitions.
- Theatre Television studios.
- · School productions.
- Car racing.

7	Cat.	Qty 1+	Qty 4+	Qty 10+
Black	NM-2812	\$23.95	\$21.35	\$18.95
Silver	NM-2814	\$23.95	\$21.35	\$18.95

Gaffer Tape - 25m

This is not your cheap plastic stuff. It is the genuine cloth-backed tape that you can split with your thumbnail. This waterproof tape is black in colour, low sheen and is the industry standard 48mm wide. Commonly called "100 mile an hour" tape, or "gaffer"tape, it was originally developed for the air conditioning industry.

\$13.50

- · It is very adhesive and
- very strong.
 Ideal for taping down
- leads on stage.

 Repairing flexible duct work.

 Other public address setups.
- Holding things together in general. A must in every toolbox!

NM-2810





\$11.95

You can repair a burst radiator hose with this!

Aluminium Foil Tape

To be used in any number of situations including RF shielding.

- 50m roll
- Foil thickness: 0.04mm
- Raw material: Aluminum foil, Acrylic-based adhesive
- Width 25mm or 50mm
- Application Temp.: -20 to 120°C

7	Cat.	Qty 1+	Qty 4+	Qty 10+
50mm	NM-2860	\$17.95	\$15.95	\$14.35
25mm	NM-2862	\$11.95	\$10.70	\$9.50

Adhesive Backed, Closed Cell Polyethylene Tape - 2m

This UV stabilised closed cell polyethylene tape is 16mm wide and 3mm thick. It is great as a seal for mounting speakers or for making water tight joins when 2 surfaces together.



• The 2 metre roll is sufficient for mounting 2 x 12" woofers.

7	Cat.	Qty 1+	Qty 4+	Qty 10+
2m	NM-2840	\$4.95	\$4.45	\$3.90

Double Sided Mounting Tape

Thousands of uses, from mounting PCBs in your project to putting up your Britney Spears posters

Both are double-sided and the NM-2821 is also foam-backed.



- 12mm wide
- Two roll sizes

7	Cat.	Qty 1+	Qty 4+	Qty 10+
10 metres	NM-2821	\$4.95	\$4.45	\$3.90
25 metres	NM-2823	\$3.95	\$3.45	\$3.15

DID YOU KNOW...

Sir Isaac Newton (1642 - 1727)

Mathematician and physicist, in 1687 he wrote "Philosophiae naturalis principia

mathematica" called "Principia" is acknowledged as the greatest scientific book ever published. Newton has been regarded for almost 300 years as the founder of modern physical science, his achievements in experimental investigation being as innovative as those in mathematical research and chemistry.

FIND OUT MORE IN STORE

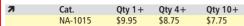
Our staff can offer friendly and expert advice, from product information to electronics solutions; we're here to help.

AEROSOLS

Lithium Grease

Long-lasting heavy duty lubricant grease for bearings, sliding mechanisms, battery terminals, chains, sprockets or other moving parts. White in colour so it forms a kind of thick, milky sea in the lubricated area. Reduce friction, protects against corrosion.

• 400 gram



INOX-MX3 Lubricant, Corrosion Inhibitor

This product is similar to popular water displacement products EXCEPT that it does not contain silicone or kerosene based solvents etc. Indeed, it is so benign it can be used around food. It is also ideal for seized nuts or screws, freeing up hinges, door locks, as a cutting or tapping & other machining agent. As the product is non-conductive, it is ideal for removing moisture from car distributors, switches, potentiometers, solenoids etc. It does not dry or wash out in water. You will be delighted with this product.

Two sizes are available: Cat. NA-1022 125g Pump Pack (can be sent by post) Cat. NA-1024 300g Aerosol Spray (can't be sent by post)

7	Cat.	Qty 1+	Qty 4+	Qty 10+
Spray Pump	NA-1022	\$7.20	\$6.25	\$5.75
Spray Can	NA-1024	\$11.50	\$10.35	\$8.95

PTFE Dry Lubricant Spray

This water displacing PTFE lubricant is formulated to provide a dry, lubricating film that is perfect for use with electronic & mechanical assemblies, chains & sprockets, rollers, runners, & power tools etc. It prevents rusting on ferrous metals and helps loosen stiff or sticking parts. The spray can be used in automotive, marine and household environments



7	Cat.	Qty 1+	Qty 4+	Qty 10+
175g	NA-1013	\$17.95	\$15.95	\$14.35

Freezing Spray

Non CFC ozone safe propellant. Instant freeze spray for rapidly cooling components to detect intermittent thermal faults, dry joints and overheating problems.

Non-flammable250g size.

TECH TIP	
Please note Aerosols cannot b	
shipped by air	e
silipped by all	

7	Cat.	Qty 1+	Qty 4+	Qty 10+	
250g	NA-1000	\$24.95	\$22.35	\$19.70	

Contact Cleaner Lubricant

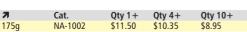
A blend of non CFC solvents and RF contact treatment oil. Ideal for cleaning and lubricating non-arcing contacts and mechanisms. Can be used for cleaning & lubricating all types of contacts.

Safe on most plastics.

7	Cat.	Qty 1+	Qty 4+	Qty 10+
175g	NA-1012	\$11.50	\$10.35	\$8.95

Circuit Board Lacquer

Non CFC ozone safe propellant. Premium quality flexible coating to protect printed circuit boards from humidity and environmental attack. Special solder through lacquer so previously coated boards can be soldered.



Electronic Circuit Board Cleaner

SERVISO

LITHIU

RVISO

ERVISO

FREEZER

SPRAY

SERVISO

CLEAN AND LUBE

SERVISO

CIRCUIT

BOARD

Non CFC ozone safe propellant. It may not be obvious, but many circuit problems occur when flux and other contaminents (even finger prints) remain on the PCB causing 'leakage' between tracks. If you work with RF, high impedance (i.e. FET Op-Amps etc), ioniser or other circuits, PCB cleanliness is a MUST. The electronic circuit board cleaner is a spray that dissolves flux residues & grime leaving the track work and board absolutely clean. We then recommend that you 'tropicalise' the board with circuit board lacquer (NA-1002)

7	Cat.	Qty 1+	Qty 4+	Qty 10+
175q	NA-1008	\$11.50	\$10.35	\$8.95

Spray-On Contact Adhesive

This pressure-sensitive contact adhesive is in an aerosol can, and bonds to paper, fabric, leather, rubber, foam, vinyl, concrete, metal, in fact almost any surface! No more spills and dribbles from a tube, or sticky screwdrivers (and plastic applicators) from applying glue to a surface. Great for laying innerbond and speaker carpet in/on speaker capinets etc.

7	Cat.	Qty 1+	Qty 4+	Qty 10+
400g	NA-1504	\$16.95	\$14.95	\$13.35

Butane Gas

Use it for filling up your gas soldering iron, flame torches, cigarette lighters, etc. Includes five different adaptors, which cover most different gas valves.

• Includes filling instructions



5 adaptors supplied

7	Cat.	Qty 1+	Qty 4+	Qty 10+
150g	NA-1020	\$5.95	\$5.25	\$4.75

Dust Remover

Non CFC. Non flammable gas which allows removal of dust from electronic, electrical and optical devices. It does not leave residues and is non toxic and non conductive.

- Much safer than flammable versions sold elsewhere
- 250 grams.

NOTE RE AIRDUSTER:

The Bureaucrats who control these things are trying to virtually ban this useful product. We have stock piled it but once its gone its gone. There - we told you!

71	Cat.	Qty 1+	Qty 4+	Qty 10+
250g	NA-1018	\$24.95	\$22.35	\$19.70

Electronic Cleaning Solvent

Non CFC ozone safe propellant. A highly efficient fast drying solvent of high purity. For use on delicate electronic, electrical & precision mechanical assemblies (i.e. tuners, switches, plugs, sockets, relays, pots, etc).



7	Cat.	Qty 1+	Qty 4+	Qty 10+
175g	NA-1004	\$11.50	\$10.35	\$8.95

Isopropyl Alcohol

Isopropyl alcohol is one of the most useful service aids you can have around. It has many uses such as head cleaning, surface cleaning and prep, contact cleaning, stain removal in the laundry etc. It's also a medical-grade surface disinfectant and is ideal for cleaning your windscreen before you put your new rego label on.

300 gram Aerosol Can

7	Cat.	Qty 1+	Qty 4+	Qty 10+
300g	NA-1067	\$9.95	\$8.75	\$7.75















TOOLS, TOOL BOXES & ACCESSORIES

Like our soldering iron range, we have made very few changes to our tool line up this year. When you already have good product, there is no point in changing. Take for example the "ADEL" brand sheet metal nibbling tool. We have been buying this tool from the factory in Chicago USA for over 20 years.

SIDE CUTTERS

135mm - ESD Safe Side Cutters

Specifically for ESD work. High quality Japanese designed, Italian manufactured cutters especially for static-sensitive applications.

• 135mm long





Qty 3+ Qty 6+ Otv 1+ TH-1922 \$29.95 \$26.90 \$23.70

127mm - Precision Angled Side Cutters

Precision side cutters that are ideal for fine PCB work They will easily cut leads flush with the board's surface. The cutters are made from quality tool steel and have soft padded handles that are spring loaded for comfortable

CS

TH-1897 \$11.95 \$10.70 \$9.50

Qty 6+

115mm - Stainless Steel Side Cutters

High quality small side cutters that have thick (2mm) blades and comfort soft plastic handles which are spring loaded.

115mm long



TH-1890

110mm - Fujiya Precision Side Cutters

Beautifully engineered side cutters for the discerning tradesman. These cutters feature high quality tool steel construction and are perfect for cutting super fine wire as well as general workshop use. They aren't just good to look at, they are tough as well and can cut steel wire up to 1.6mm without harm. The insulated handles are spring loaded for effortless use.

• 110mm long

• Blade hardness: Rockwell C Scale 57~61

· Soft grip handle JAYCAR QUALITY **JAPANESE MADE**







TH-2332

Qty 3+

1500mm - Carbon Steel Precision Side Cutters

These cutters are made from the same high carbon steel as our TH-1885 long nose pliers and are designed for sharp cutting in precision wiring They have insulated soft-touch handles and a coil return spring for fatigue free use.

ENGINEER.



AYCAR QUALITY **IAPANESE MADE**

Qty 6+ TH-1891 \$34.95 \$32.90

WHEN STAINLESS STEEL IS NOT THE BEST

We are big fans of Stainless Steel. We love it in tools, fasteners & many building products. It is not, however, always the best material. Top chefs will tell you, for example that the best knives are not stainless. They are made out of carbon steel. Why? Carbon steel is far harder & tougher than stainless. The problem of course is that carbon steel will rust if not maintained. In our search for the best hand-tools we have decided to introduce two very high quality Japanesemade products made out of carbon - steel. They are not cheap but they are for the professional user whose time is money. Like carbon steel knives, rust is not a problem if used constantly. They will, however, pay you back every day because they will stand up to heavy wear & tear. For those who have only occasional use for hand tools, we sincerely recommend stainless steel products.

It's a good product that never breaks, and when the punch wears out we have a spare available.

On the other hand please have a look at the new heavy duty terminal crimper on page 141. Normally these thing's cost hundreds of dollars. It is an absolute must for the big lugs encountered in solar arrays etc.

To avoid confusion we have put a small logo "SS" nominating which tool is made out of "stainless". "CS" means carbon steel.

LONG NOSE PLIERS

150mm - Precision Long Nose Pliers

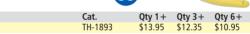
Precision, slim line long nose pliers that are ideal for working in confined areas. They have serrated jaws so you can get a firm grip on the item you're holding. The pliers are made from quality tool steel and have soft padded handles that are spring loaded for comfortable long term use.



TH-1887 \$11.95 \$10.70 \$9.50

145mm - Stainless Steel Long Nose Pliers

The partner to our TH-1890 stainless steel cutters. These have half round smooth gripping jaws perfect for adjusting and bending components, picking up that dropped nut, etc. Comfortable soft plastic handles which are spring loaded.



110mm - Fujiya Precision Long Nose Pliers

These are the perfect companion for our TH-2332 precision side cutters and are made to the same exacting specifications. The insulated handles are spring loaded for effortless use.

• 110mm long

Blade hardness: Rockwell C Scale 53~57

· Soft grip handle







Cat. Qty 6+ TH-2334 \$29.95 \$27.95

TH-1885

125mm - Carbon Steel Precision Long Nose Pliers

These quality pliers are made in Japan from the same high carbon steel that is used to make professional chef's knives. The pliers feature serrated jaws and a box joint to provide a precise action and strong grip. The coil spring ensures smooth, fatigue-free use. Insulated soft touch handles

ENGINEER.





Qty 3+ \$31.45 \$34.95

CUTTERS & PLIERS SET

Stainless Cutter / Pliers Set

Set of five 115mm cutters and pliers for electronics, hobbies beading or other crafts. Stainless steel with soft ergonomic grips

Contents:

- Flush cutters
- Long nose pliers Flat nose pliers
- Bent nose pliers Round nose pliers

Cat Qty 3+ TH-1812 \$29.95 \$27.95 \$23.70

PLIERS & CUTTERS

170mm (6.5") Long Nose Pliers - Insulated

You can see the quality German design in these strong and attractive pliers. They are drop forged to the same standards as the other tools in the range and have the same cutting capacity - up to 4.0mm electrical wire. A very attractive tool with comfortable handles. The high quality manufacture means they can take the work and last for ages. This could be the last pair of long nose general purpose pliers you need to buy!

• 170mm / 6.5" long.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1986	\$16.95	\$14.95	\$13.35

180mm (7") Combination Pliers

Strong, Tough & Reliable These high quality drop forged alloy steel pliers are a professional tool and manufactured to the rigid German DIN standards for electrical safety & mechanical strength. They are for serious tradesmen who need a quality tool. These pliers will cut hard (piano wire) wire up to 1.6mm & soft (annealed copper, aluminium silver etc.) up to 4.0mm Non slip double inset handles are comfortable to hold

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1984	\$19.95	\$17.70	\$15.70

160mm (6") Side Cutters - Insulated

This drop forged alloy tool is made to the same standards as our TH-1984 combination pliers. It is just as tough and will also cut piano wire up to 1.6mm. This is a quality tool and designed for dedicated wire cutting. It has comfortable double inset handles.

• 160mm/6" long.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1985	\$17.95	\$15.95	\$14.35

PLIERS

175mm - Screw Removing Pliers

This tool is basically designed to remove, by brute force, a hopelessly stripped out head of any type of small non-countersunk screw. The secret is an oval-shaped serrated hole in the end of the plier. You place the plier over the head of the screw, grip and rotate the plier. This system applies a lot more torque to the head of the screw than a drill bit ever could. It's reminiscent of the plier that a dentist used to extract your tooth!!!ts Japanese manufacturer has provided a beautifully made and finished product. Suitable for any screw in the range of 2.0 to 5.0mm or so, although it will work on larger screws to lesser effect.



Aluminium/Stainless "Fishing" Pliers

These are the classiest looking pliers you will ever see. They feature a CNC-machined body and inner jaw assembly made from heat treated and hard anodised aluminium. The hard working part of the jaws are inserts made from a hardened stainless steel alloy. The inserts are held in place by machine screws. There is also a set of carbide cutter inserts but we feel that they do not look sturdy enough to cut wire Fishing lines should be OK. Supplied with pouch and lanyard

· Pliers measure 195mm long overall

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1921	\$39.95	\$37.45	\$31.90

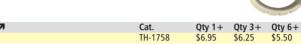
SHEARS

180mm (7")High Quality Stainless Steel Electrical Shears

Slice through soft electrical cable with ease. These precision spring loaded stainless steel electrical shears will cut soft wire up to 22sqmm and make light work of cable ties, heatshrink, light hook-up wire and cable braid etc. The shears feature insulated handles and a convenient, thumb operated lock to keep them closed when not in use. Ideal for cutting ribbon cable

TH-1757 140mm (5.5") High Quality Electrical Shears

These shears offer impressive cutting ability with finely honed and serrated blades. Great for cutting insulation, heatshrink, spaghetti and light duty hook-up wire. These shears feature insulated handles



165mm (6.5") Stainless Steel Cable Shears

This set of cutters has a cutting capability of up to 10mm cable. It is constructed from stainless steel and has a hardened long-life cutting edge. For safety and ease of storage, it can be locked in the closed position.

- Stainless Steel
- · Lightweight
- Lockable



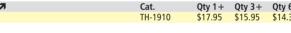
7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1898	\$19.95	\$17.70	\$15.70

SPANNER SET

10 Piece Spanner Set for Electronics

Ideal mini spanner set. Set of 10 pieces, open end/ring combinaion. Suitable for light hobbyist use.

- Sizes supplied are: 4.0, 4.5, 5.0, 5.5,
- 6.0, 7.0, 8.0, 9.0, 10 & 11mm. · Supplied in a plastic wallet.
- Cat. Otv 6+



Spot Face Cutter for Strip Boards

The spot face cutter is designed to neatly remove copper strip on strip type prototyping boards. Insert the tool in the pre-drilled hole and rotate it until the track is removed entirely. Easy to use and much more efficient than other

- Handle: 60(L) x 17(W) x 17(D)mm
- Total Length: 110mm

71	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2461	\$8.95	\$8.25	\$6.95

DISCOUNT TRADE CARD

If you regularly purchase electrical or electronic goods to be used for business purposes you may qualify for a **Jaycar Electronics Trade Card which** entitles you to substantial discounts on most Jaycar products. Discounts range from 5% to 30% depending on the type and quantity of product purchased. Excludes Kits & Books.

ABN will be required - see our website or Store Manager for further details.



High Quality Jeweller's Screwdrivers

Each screwdriver has a rotating top, larger handle and a strong chrome vanadium tip providing a comfortable finger/palm rest and an easily turned body. These look very similar to those expensive German ones.



7	Туре	Cat.	Qty 1+	Qty 3+	Qty 6+
	1.0mm Slot Tip	TD-2060	\$3.50	\$3.15	\$2.75
	1.5mm Slot Tip	TD-2061	\$3.50	\$3.15	\$2.75
	2.0mm Slot Tip	TD-2062	\$3.50	\$3.15	\$2.75
	#000 Phillips	TD-2064	\$3.50	\$3.15	\$2.75
	#00 Phillips	TD-2065	\$3.50	\$3.15	\$2.75

.leweller's Screwdriver Set

All metal precision screwdrivers for watchmakers, jewellers, modelmaking or just fixing the sunnies. Set of six.

• Slotted: 1.0, 1.2 & 1.6mm • Phillips: #00, #0 & #1



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2023	\$9.95	\$8.75	\$7.75

5 Piece Torx Screwdriver Set

Easy to use colour coded Torx screwdrivers in a plastic case. Each screwdriver has a swivel head for easy use.

Blade length is 20mm and torx sizes are T6, T7, T8, T9 & T10.



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2070	\$12.95	\$11.35	\$10.35

6 Piece Precision Tamperproof Torx Set

A quality set of chrome vanadium drivers consisting of T7,

T8, T9, T10, T15 and T20. All drivers are 145mm length & presented in a felt-lined



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2021	\$19.95	\$17.70	\$15.70

6 Piece Insulated Electronic **Screwdriver Set**

These screwdrivers have ergonomic handles with excellent non-slip grips. The shafts are fully insulated and rated for 1000V. The set contains all the smaller sizes you need for working on electronic gear. Storage case included.

- Slotted: 2mm, 2.5mm, 3mm Phillips: #00, #0, #1
- 1000V rated
- TÜV and GS approved
- Case: 192(L) x 130(W) x 26(H)mm

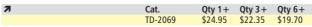
7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2026	\$19.95	\$17.70	\$15.70

15 Piece Micro Driver Set

This handy set comes with all those microscopic fasteners we come across in modern electronics. The ergonomic handles are colour coded for easy identification and they come in a sturdy storage case.

Slotted: 1mm, 1.4mm, 1.8mm, 2.4mm Phillips: #000, #00, #0, #1 Torx: T5, T6,T7, T8 Hex: 1.5mm, 2mm, 2.5mm Drivers: 105mm long

Case size: 192(L) x 130(W) x 26(H)mm



4 in 1 Screwdriver Set

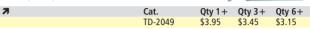
This handy screwdriver has four different bits and is about the size of a normal pen. The lid can also be used to extend the length of the handle Encased in a durable plastic case.



Low Voltage Circuit Tester 6, 12, 24 Volts

Looks like a neon test screwdriver but instead of a blade on the end this tester has a probe and a 28' lead which clips to ground.

• Suitable for 6/12/24 volts for use on cars, trucks, boats, etc.



"Smart" Test Screwdriver

- Capacitor checkDiode check
- Transistor check
- Globe/relay/fuse/speaker/resistor check
 Locating broken wire
- Picks up static radiation of TV or monitor
 Instantaneously checks AC power
- Earth disconnection check
- AC voltages
 DC voltage test up to 250V DC
- Continuity check
 Polarity check 1.5V to 36V DC
- Supplied with comprehensive instructions.



7	Cat.	Qty 1+	Qty 3+	Qty 6+	
	TD-2055	\$11.95	\$10.70	\$9.50	

7 Piece Cr-V Screwdriver Set

Made from an alloy of heat-treated chrome vanadium and molybdenum steel for high wear resistance and strength. Made to last. The set contains:

- Slotted: 2.5 x 75, 5 x 75,
- 5 x 150, 6 x 125mm Phillips: #0 x 75, #1 x

75, #2 x 100mm



Cat.	Qty 1+	Qty 3+	Qty 6+
TD-2088	\$8.95	\$7.95	\$6.95

ELECTRICAL SCREWDRIVERS

This range of trade quality insulated screwdrivers is one of the most comfortable screwdrivers we have ever used. The ergonomic handles have a soft rubber coating for a secure, comfortable grip that you can use for hours on end. All are TUV and GS approved and rated up to 1kV.

· A size for any application

Slotted

TD-2230 Flat Blade 2.5 x 75mm TD-2231 Flat Blade 3.0 x 100mm TD-2232 Flat Blade 5.5 x 125mm TD-2233 Flat Blade 6.5 x 150mm

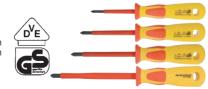
TD-2234 Flat Blade 8.0 x 175mm



7	Wmm	Lmm	Cat.	Qty 1+	Qty 3+	Qty 6+
	2.4	75	TD-2230	\$4.50	\$3.95	\$3.60
	4.0	100	TD-2231	\$4.95	\$4.45	\$3.90
	5.5	125	TD-2232	\$5.65	\$4.95	\$4.45
	6.5	150	TD-2233	\$6.95	\$6.25	\$5.50
	8.0	175	TD-2234	\$7.95	\$6.95	\$6.25

Phillips

TD-2235 Phillips #0 x 60mm TD-2236 Phillips #1 x 80mm TD-2237 Phillips #2 x 100mm TD-2238 Phillips #3 x 150mm



7	Size	Blade	Cat.	Qty 1+	Qty 3+	Qty 6+
	0	60mm	TD-2235	\$4.95	\$4.45	\$3.90
	1	80mm	TD-2236	\$5.65	\$4.95	\$4.45
	2	100mm	TD-2237	\$6.95	\$6.25	\$5.50
	3	150mm	TD-2238	\$7.45	\$6.50	\$5.75

ELECTRICAL SCREWDRIVER SET

1,000V 7 Piece Screwdriver Set

A quality set of 7 screwdrivers with storage box that offers reliability & value without compromise. GS & VDE tested & approved to 1000V. With red handles and insulation right to the tip, you will find them amongst your tools quickly & easily.



• DIN EN 60900.

Flat: 1.2 x 6.5 x 150mm, 1 x 5.5 x 125mm, 0.8 x 4 x 100mm and 0.6 x 3.5 x 75mm

Phillips: #2 x 100mm, #1 x 80mm and #0 x 60mm



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2022	\$19.95	\$18.70	\$15.70

CABLE STRIPPERS

Budget Coax Cable Stripper

Strips insulation from any coax cable and ideal if you only need to strip coax occasionally. Simply insert the cable, twist and turn, then use the other end of the tool to remove the inner insulation.



7	Cat.	Qty 1+	Qty 3+	Qty 6+	
	TH-1815	\$4.95	\$4.45	\$3.90	

DIY Coaxial Cable Crimper, Cutter and Stripper

This handy tool guts, strips and crimps RG-58, RG-59 and RG-6 cables and connectors. It strips the centre core or outer jacket by rotating the tool between 2 to 3 times around the cable. Crimp connectors are installed easily by squeezing the handles.



Perfect for DIY Home use

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1875	\$11.95	\$10.70	\$9.50

Pocket Wire Stripper

Strips anything from 2G to RG6 coax. Easy to use and small enough to take anywhere on the job.

• 120mm long



Wire Stripper, Cutter Pliers

High quality toughened wire stripper will strip wire sizes from 0.9mm to 5.5mm. Also includes a wire cutter and pliers. Made of alloy steel with hardness and industrial surface treatment and comfortable plastic grip handles.

· Length 165mm.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1825	\$14.95	\$13.35	\$11.70

Wire Stripper

Great way to strip all sorts of cable without damaging the conductors.

- Automatically adjusts to insulation diameter
- One hand operation. • Spring return.

FEATURES A FINGER GUARD



Qty 6+ TH-1824 \$16.95 \$14.95 \$13.35

Rotary Coax Stripper

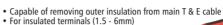
This handy stripper will strip the outside jacket and inner conductor in one operation.

- Suitable for RG58/59/62/6 and 3C2V 75 ohm cable.
- Simply rotate the stripper clockwise around the cable 3 to 6 times. A quality stripper suited to installers.

7	Cat.	Qty 1+	Qty 3+	Qty 6+	
	TH-1820	\$19.95	\$17.70	\$15.70	

Heavy Duty Wire Stripper / Cutter / Crimper with Wire Guide

Designed for easy wire stripping. The alloy steel can strip all types of cable from AWG 10-24 gauge (0.13 -6.0mm), and the wire guide ensures the correct length is stripped time and time again. It incorporates a precision cutting blade for easy wire cutting It also features quality crimping jaws.



- For non-insulated terminals (1.5 6mm)
- For auto ignition terminals (7-8mm)
 This is the best all round wire tool
- we've seen for a long time,

Spinig return				
7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1827	\$29.95	\$26.90	\$23.70

CRIMPING TOOLS

5 Way Crimping Tool - Auto Type

This crimping tool will do the followina:

- Cut wire
- Crimp insulated & non
- insulated terminals Strip wire with diameters 0.75, 1.0, 1.5, 2.5, 4.0 & 6.0mm
- Cut bolts with diameter M2.6, M3.0, M3.5, M4.0 & M5.0

	Cat.	Qty 1+	Qty 3+	Qty 6+	
	TH-1828	\$8.95	\$7.95	\$6.95	

IDC Crimping Tool

Suits all IDC cable connectors. Commonly used for connecting items such as SCSI and IDE computer plugs. Don't destroy connectors with a vice or a hammer, crimp them the easy way.

Crimping distance from 27.5mm to 6mm (with attachment)





7	Ca	t. Q	ty 1+
	TH	-1941 \$8	8.95

Crimping Tool for Non-Insulated Lugs A quality tool at a budget price. Solid box joint and

crimping dies, comfortable handles and spring loading make this an easy crimper to use all day. It handles noninsulated lugs from 14-18 AWG and 22-26 AWG and also includes

185mm long



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1834	\$14.95	\$13.35	\$11.70

6P/8P Modular Crimp Tool

This tool will crimp the following plugs: 6P2C, 6P4C - RJ12, 6P6C - RJ12, 8P - RJ45.

· It also cuts and strips the cable



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1935	\$19.95	\$17.70	\$15.70

Tools - Crimping

CRIMPING TOOLS (CONTINUED)

Compression Crimping Tool for F-Type Plugs

A compact compression tool designed for our Foxtel approved F-type plug (PP0708). A channel accurately positions the plug, and a spring-loaded clamp holds the cable in position. These features and leverage action of the handle ensure easy F-type compression crimps can be performed quickly and easily time after time.

• Dimensions: 143(L) x 22(W) x 45(H)mm

RELATED PRODUCT See page 188 for F type crimp plugs

Cat Otv 1+ Otv 3+ Otv 6+ TH-1803 \$27.95 \$29.95 \$23.70

Heavy Duty Coax Crimping Tool

This tool is specifically designed for crimping F, N, BNC, TNC, UHF, ST, SC & SMA connectors onto coax cable for TV and communications applications. It also has adjustable crimp force and 3 hex dies: 2.54mm. 9.12mm & 10.3mm.



4P/6P/8P/10P **Modular Crimp Tool**

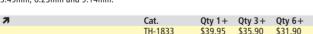
This great tool will cut, strip and crimp flat telephone cable, or Cat5e type cable also. Constructed from high quality carbon steel, it features interchangeable dies and ergonomic design. It also has a brace to lock them closed.



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1	936 \$39.95	\$35.90	\$31.90

Hex Ratchet Crimping Tool

Heavy duty ratchet tool designed for crimping F, N, BNC, TNC, UHF, ST, SC & SMA connectors onto RG6, RG58 or RG59 coax cable. It features adjustable crimping force and ratchet mechanism for complete repeatability. Four hex crimping dies: 1.72mm, 5.49mm, 8.23mm and 9.14mm.



Ratchet Crimping Tool for F-Type Connectors

A strong, heavy duty tool for crimping F-Type CATV connectors onto RG6 or RG59 coax cable. Ideal for cable TV or RF distributions system installers. The tool features a secure ratchet mechanism for accurate and reliable crimps.



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1831	\$39.95	\$35.90	\$31.90



Galileo Galilei (1564 -1642)

He was the first to use the telescope to provide evidence that the Earth revolves around the Sun. This theory was in contrast to that held by the majority at the time.

Heavy Duty Ratchet Crimp Tool for Insulated Terminals

Manufactured from quality carbon steel and fitted with hardened and tempered jaws. Features a chemically blackened finish for improved corrosion resistance and heavy duty PVC handles to provide

operator comfort. Crimping pressure is precisely adjustable and a ratchet release lever is fitted to enhance safety. Has easy identification for crimping Red, Blue, and Yellow Terminals. Suitable for crimping insulated terminals from 0.5mm to 6.0mm in size.

· Overall length is 220mm.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1829	\$39.95	\$35.90	\$31.90

Ratchet Crimping Tool for BNC/TNC Connectors

A heavy duty tool for crimping BNC/TNC connectors onto RG58/59/62 coax cable. The tool features a secure ratchet mechanism for accurate and reliable



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1846	\$39.95	\$35.90	\$31.90

Heavy Duty Terminal Crimper

Commonly used for crimping lug/eye terminals onto heavy gauge power cables. The lever arm action makes for a good solid hex crimp on the terminal. Features a built in rotating die which can be rotated to suit terminals for 6/10/16/25/35/50mm2 cable (10AWG-1/0AWG).



- Suitable for use with our PT-4930 to PT-4939 range of eye terminals.
- 450mm long.



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1849	\$49.95	\$44.90	\$39.90

Ergonomic Supercrimp Tool

This super-heavy-duty ergonomic crimper is designed to perform the same tasks as a normal crimper, but with 40-50% less handle-force required, and a pressure adjustment dial for variable actuation force. It uses interchangeable dies (available separately) that can be quickly and easily changed. Buy only the ones you require for each job! Dies available for telephone and network plugs, insulated terminals, BNC/TNC connectors to suit RG58/RG59/RG62 coax, and even F-

type CAT5 connectors to suit RG59/RG6 coax.



Cat. TH-1952Cat. TH-1953 Cat. TH-1954 Cat. TH-1955 Cat. TH-1956 Cat. TH-1957

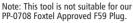
SUPERCRIMP TOOL

7 Cat.		Qty 1+	Qty 3+	Qty 6+
TH-1	950	\$49.95	\$44.90	\$39.90
Dies	Cat.	Qty 1+	Qty 3+	Qty 6+
6P6C Telephone Connectors	TH-1952	\$17.95	\$15.95	\$14.35
8P8C Computer Network Connectors	TH-1953	\$17.95	\$15.95	\$14.35
Fully Insulated Crimp Terminals	TH-1954	\$17.95	\$15.95	\$14.35
BNC/TNC Coax Connectors for RG58/59/62	TH-1955	\$17.95	\$15.95	\$14.35
F- type CATV to suit RG59 / RG6	TH-1956	\$17.95	\$15.95	\$14.35
Non-insulated Crimp Terminals 22 - 12 AWG	TH-1957	\$17.95	\$15.95	\$14.35
SMA / Fibre Optic	TH-1958	\$17.95	\$15.95	\$14.35
PV Connector Die	TH-1959	\$29.95	\$26.90	\$23.70

Compression Crimping Tool

A precision crimp tool that employs a ratchet action ensuring correct crimping

pressure is applied for reliable, trouble-free compression BNC, RCA, PAL and some F-type coaxial connectors. Adjustable compression depth.





7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1801	\$59.95	\$56.50	\$47.90

CRIMPING SETS

Automotive Crimp Tool with Connectors

Unlike other automotive crimp pliers, this excellent tool comes with 80 of the most popular automotive connectors and NOT a bunch of junk you will never use. The tool will cut & strip wire, crimp connectors and also cut a range of metric bolts. Every car enthusiast should have one of these.

- 8 each of male & female blue bullets
- 8 each of male & female red bullets 8 each of male & female blue spades
- 8 each of male & female red spades
- 8 x red eye connectors 8 x blue butt joiners





7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1848	\$13.95	\$12.35	\$10.95

CAT5 TOOLS

Cat5 Punch-Down Tool / Stripper

LOW-COST



This versatile little tool will strip wire up to 5 to 6.2mm diameter, and doubles as a punch-down tool for 110/88-type terminals, with blade. Made from poly-resin plastic, with steel cutters this lightweight tool could easily fit in the pocket or tool kit.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1738	\$8.95	\$7.95	\$6.95

Cat5 Punch-Down Tool - Adjustable

It has a turnable body, adjustable impact pressure and a storage compartment within the handle for holding a spare blade. Frame made of polyacetal resin with fibre glass orange handle. Supplied with 88 blade. Spare blades see TH-1743 below.

Imp High		Low: 10 +/- 2 kg (s				LIERR LIBRARITY
RELATED PRODUCT See CATSe cables on page 206.				umm		
7			Cat. TH-1740	Qty 1+ \$22.95	Qty 3+ \$20.35	Qty 6+ \$18.35

Blades for Cat5 Punch Tools



These blades are to suit the punch tool - TH-1740. Made from hardened SNCM-21, these blades are both changeable and reversible, and can be changed by hand, no screwdriver necessary. Blade retaining pressure within 4-6 kg. One end of each blade has a cutter for that extra-neat termination, the other end is plain for those "linked"

7	Cat.	Qty 1+	Qty 3+	Qty 6+
110 Krone	TH-1743	\$24.95	\$22.35	\$19.70

F-CONNECTORS

F Connector Seating Tool

This 3 way tool assists in the connection of F type connectors. Includes flaring tool for RG6 and RG59 cable and pre-threading tool. Measures: 60mm diameter



Suits RG6/RG59

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1883	\$11.95	\$10.70	\$9.50

CABLE STAPLE GUNS

Cable Staple Gun

Take the pain out of cable installation. Instead of trying to pound away with a hammer, simply staple the cable to eaves, rafters or joists. The staples have an integral plastic cable clamp that holds the cable firmly in place. Each gun takes a variety of staples sizes to accommodate cables up to 12.5mm diameter.

CABLE STAPLE GUN 4 - 10MM Cat. TH-2610

Includes gun, 2 interchangeable blades and 200 staples.

CARLE STAPLES REFULL 4 - 6MM PK 200 Cat. TH-2611

- Round cable: 4 6mm
 Flat cable: 2.5 4.0mm high and <8.0mm wide
 Suits: RG58, RG59, Cat5/6, Alarm Cable, Flat telephone cable, 10A T&E, Extra HD Fig8

CABLE STAPLES REFILL 6 - 8MM PK 200 Cat. TH-2612

- Round cable: 6 8mm
 Flat cable: 4.5 6.3 high and <10.3mm wide
- Suits: RG6Q, RG8, 8GA, 10A Mains Flex, Jumbo Fig8

7			Cat.	Qty 1+	Qty 3+	Qty 6+
	Cable Gun		TH-2610	\$19.95	\$17.70	\$15.70
	Refill Staples 4-6mm	Pkt 200	TH-2611	\$9.95	\$8.75	\$7.75
	Refill Staples 6-8mm	Pkt 200	TH-2612	\$9.95	\$8.75	\$7.75

Heavy Duty Cable Staple Gun Kit 4 - 12.5mm

Includes heavy duty die cast gun, 3 interchangeable blades and 200 staples in a carry case.

CABLE STAPLES REFILL 8 - 9MM PK 200 Cat. TH-2616

- Round cable: 8 9mm
 Flat cable: 4.0 7.0mm high and <12.5mm wide
- Suits: RG6Q, RG8, 8GA, 20 T&E, VGA

CABLE STAPLES REFILL 9.5 - 11MM PK 200 Cat. TH-2617

- Round cable: 9.5 11mm
 Suits: 4GA, RG11, RG60, RG213, Loom Tube

CABLE STAPLES REFILL 11.5 - 12.5MM PK 200 Cat. TH-2618

- Round cable: 11.5 12.5mm
 Suits: RG9, HDMI, Loom Tube

7			Cat.	Qty 1+
	Cable Gun		TH-2615	\$29.95
	Refill Staples 8-9mm	Pkt 200	TH-2616	\$4.95
	Refill Staples 9.5-11mm	Pkt 200	TH-2617	\$4.95
	Refill Staples 11.5-12.5mm	Pkt 200	TH-2618	\$4.95

WIRE DRAW TOOL

Wire Draw Fish Tape

A fish tape is a tool that's used to draw wire and cable through wall cavities or conduit. The dumb way to do this is with a length of fencing wire and hours of frustration. The smart way is with 30m of flat, rigid spring steel with a built-in cable eye on the end that rolls up into its own case after use. You can easily direct the rigid wire exactly where you need to.

No electrician, data cabler, antenna, home theatre or security installer should be without one.

- Length: 30m
- Dimensions: 305(Dia) x 38(H)mm



CRAZL

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1869	\$29.95	\$27.95	\$23.70

ALLEN KEYS

Folding Torx/Allen Key Sets

Handy folding sets of Torx or Allen keys with sturdy anodised aluminium handles The handles have M8, M10, E8 and E10 spanners built into them. Never lose a bit again.



7	Cat.	Qty 1+	Qty 3+	Qty 6+
7 Piece Metric	TD-2172	\$5.95	\$5.50	\$4.75
7 Piece Imperial	TD-2174	\$5.95	\$5.50	\$4.75

25 Piece Allen Key Set

25 different size Allen keys in a plastic wallet. Both metric and imperial sizes.

4.5, 5.0, 5.5, 6.0, 8.0, 10.0mm • Imperial 3/8, 1/4, 7/32, 3/16, 5/32, 9/64, 1/8, 7/64, 3/32

impendi 5/0, 1/1, 1/	32, 3, 10, 3,32, 3,01, 1,0, 1,01,	3/32, 3/01,	.,		
7	Cat.	Qty 1+	Qty 3+	Qty 6+	
	TD 2052	¢11 05	¢10.70	¢0.50	

MINI KNIFE & MULTI-TOOLS

Mini Folding Knife

Handy pocket-sized folding utility knife. Lockback design with disposable blades and a thumb button for one-handed opening. Keep one on your keyring.

- Ouick-change blade
- Anodised aluminium handle
- · Dimensions: Closed 64mm, open 98mm
- Pk 5 spare blades: TH-1912

NOTE: Not for sale to under 18 year olds

1	7	Cat.	Qty 1+	Qty 3+	Qty 6+		
	Knife	TH-1911	\$9.95	\$8.75	\$7.75		
	Pk 5 Blades	TH-1912	\$3.95	\$3.45	\$3.15		

NIBBLING TOOLS

Nibbling Tool

Will cut any shape out of aluminium, plastic, copper and other unhardened metals up to 18 gauge. Tool is designed to fit into the palm of your hand for easy use, simply drill a 1/4" hole to start.



<i>n</i>	Cat.	Qty I+	Qty 3+
	TH-1768	\$14.95	\$13.35

Adel Nibbling Tool

The original and best. The Adel nibbling tool has been around for years and for good reason. It's still the best hand nibbler going around and is ideal for chassis-bashing and all sorts of hobby applications. Cut, notch or trim simple or complex shaped holes in plastics, laminates, leather or metal.

- Capacity:Mild steel: 1.2mm
- Aluminium: 1.6mm
- · Plastics: 2mm
- Spare punch use TH-1767 Made in USA.

7		Cat.	Qty 1+	Qty 3+	Qty 6+	
	Nibbling Tool	TH-1765	\$49.95	\$44.90	\$39.90	
	Spare Punch	TH-1767	\$39.95	\$35.90	\$31.90	

DID YOU KNOW...

Nikola Tesla (1856 - 1943)

In 1882, he stated the rotating magnetic field principle and invented the alternating current long-distance electrical transmission system six years later.

VICE

Pin Vice

A handy addition to any tool case. All metal construction with two internal collars. The head rotates freely making it ideal for drilling delicate PCBs or plastic cases.



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1772	\$13.50	\$11.95	\$10.70

Mini Bench Vice

This sturdy lightweight vice will clamp to surfaces up to 1" thick and hold material up to 2" thick. This handy tool is ideal for hobby work or as a light duty workshop bench vice. Made from strong, lightweight aluminium that won't rust or corrode, the vice will be a useful addition to anyone who needs a third hand!

• Vice jaws are 63.5mm wide and will open to more than 50mm



7	Cat.	Qty 1+	Qty 3+	Qty 6+	
	TH-1764	\$14.95	\$13.35	\$11.70	

270° Rotation Clamp Vice

Rotate the head through 270° to make your work easier. The base will clamp to any bench or table up to 55mm thick and the 40mm jaws will take a job up to 58mm in size. Once in position, the head is easily fixed in position with a quick release lever.

• Base: 115(W) x 94(D)mm



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1769	\$39.95	\$35.90	\$31.90

Vacuum Bench Vice - 75mm Jaw

Qty 6+

\$11.70

This quality vacuum vice is made from hardwearing diecast aluminium. The vice consists of three-pieces; a vacuum base, ball joint clamp and a 75mm opening jaw with removable soft rubber jaw covers. The 'V' grooved jaws are ideal for holding cylindrical and irregular shapes, making it well suited to small bench jobs such as model building, jewellery making and general PCB/chassis work. The multi-positional ball swivel allows the jaws' working position to be varied through a full 360° axis.

• Stands approximately 160mm tall.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1766	\$29.95	\$26.90	\$23.70

DO A FRIEND A FAVOUR

If you have a technical friend or someone who may be just interested in some of the products we stock, simply mail or email his or her address to:

Catalogue Department Jaycar Electronics: PO Box 107 Rydalmere, NSW 2116 or email to catalogue@jaycar.com



DRIVERS / DRIVER BITS

Blank Hex Driver For Individual Screw Bits



Use this driver with the bits supplied in our TD-2035 bit sets on the right. It will accept any hex bit in our range and features non-slip rubber handle with magnetic chrome vanadium 50mm long shaft.

Overall length 160mm.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2032	\$6.95	\$6.25	\$5.50

7 Piece Hex Nut Driver Set

A useful set of hex nut drivers with deep sockets that allow a generous length of thread to protrude though the nut you are tightening. Sizes supplied are M3, M3.5, M4, M4.5, M5, M 5.5, and M6. A plastic storage pouch keeps the set



• A quality Japanese product.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2339	\$23.95	\$21.35	\$18.95

The Power Driver Bit Set

The set consists of 32, yes 32 of the driver bits that you don't normally see. You don't get any slotted, Phillips or Pozidriv™ bits.

You do get:

• 4 x Tri - wing, size 1, 2, 3, and 4 • 9 x Torx (tamperproof), size T8, T10, T15, T20, T25, T27, T30 and T35

4 x Pin drive (snake), size 4, 6, 8 and 10
6 x In - Hex (allen), *metric, size 2, 2.5, 3, 4, 5 & 6
6 x In - Hex (allen), *imperial size 5/64", 3/32", 7/64", 1/8",

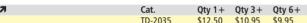
9/64" and 5/32"

• 3 x Torque Set, size 6, 8 and 10.

With this you get a hex driver with magnetic retainer, all in a nifty plasticy - rubber holder that is smaller than a deck of cards! (67 x 45 x 30mm).

*Tamperproof Torx works as normal Torx as well. *Tamperproof In - Hex drive type.





LED Screwdrivers with 10 Bits



LED illuminated bit driver for working in spaces with poor lighting. The handle has four LEDs built in to provide working light. 10 bits are included, but any standard hex bit will fit. Great for fiddling around under the bonnet etc

• Four LEDS to eliminate blind spots

• Bits included: PH #0, #1, #2, slotted 3, 4, 5mm, T15, M6 pin drive, M4 hex, hex - 1/4" square converter



Qty 1+ \$14.95 TD-2091

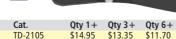
Keycase Mini Driver Set

Handy set of 12 mini bits and driver in a convenient key-sized storage case.

- Flat: 1.5, 2, 2,5mm

- Phillips: 0, 00, 000
 Torx: T5, T6, T7, T10
 TN8, Hex 2.5mm • Case size: 95(H) x 60(W)mm





Freecall order hotline: 1800 022 888

32 Piece Precision Driver Set

High quality driver set with all those really small bits. Tactile handle with hardened hex shaft that extends from 140 to 210mm. Ideal for jewellery, model making or electronics. Storage case included.

1, 1.5, 2, 2,5, 3, 3.5, 4mm 000, 00, 0, 1 Slotted.

Phillips: Pozidriv: 0,1

74, T5, T6, T7, T8 T9, T10, T15, T20 0.7, 0.9, 1.3, 1.5, 2, 2.5, 3, 4mm Torx: Hex:

Case: 157(L) x 100(W) x 27(D)mm

7 TD-2106 \$16.70

DRIVER BITS SETS

100 Piece Driver Bit Set

The ultimate driver bit set



Includes:

- 1 x magnetic bit holder
- 1 x square to hex socket driver 50mm
- 1 x square to hex socket driver 25mm 1 x square to hex bit adaptor
- Driver bits:
- Phillips # 0, 1, 2 (x5) & 3 Pozidriv™ # 0, 1, 2 (x5) & 3 Square drive # 0, 1, 2 & 3

- Slotted 3, 4, 4.5, 5, 5.5, 6, 6.5, 7 & 8mm Prin drive (snake) # 4, 6, 8 &10

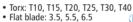
- Pin drive (snake) # 4, 6, 8 & 10
 Torque Set # 6, 8 & 10
 Torx T8, T10, T15, T20, T25, T27, T30, T40 & T45
 Tamper proof Torx (Metric) T8, T10, T15, T20, T25, T27 & T30
 Hex (Allen) Metric 1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 5.5, 6.0 & 8.0mm
 Tri-Wing # 1, 2, 3 & 4 Clutch drive # 1, 2 & 3
 Hex (Allen) Imperial 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32 & 1/4"
- Spline drive M5, M6 & M8
 Tamper Proof Allen (Metric) 2.0, 2.5, 3, 4, 5 & 6mm
 Tamper Proof Allen (Imperial) 5/32, 9/64, 1/8, 7/64, 3/32 & 5/64"
 Wing nut driver,
- All in a snap lock case with clear markings to show where each bit rests.

Note that commonly used driver bits are supplied in greater numbers.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2038	\$19.95	\$17.70	\$15.70

18 Piece Stainless Steel Mixed Bit Set

A collection of commonly used driver bits in a handy rubber edged case. Features a bit locking mechanism for stable driving. All stainless steel so you can be sure they'll last. Driver not included.



- Philips head: 1, 2, 2, 2, 3
- Hex: 4, 5, 6





21 Piece Stainless Steel Micro Bit Set with Driver

Repairing watches, mobile phones, sunglasses, and other objects that use tiny screws need not be out of your grasp. This set contains a collection of

stainless steel bits for all those repair jobs and more Housed in a neat rubber edged case to withstand small knocks and bumps. Driver included

- Hex: 0.7, 0.9, 1.3, 1.5, 2 Torx: T5, T6, T7, T8, T9, T10, T15 Philips: 000, 00, 0, 1
- Flat blade: 0.8, 1.2, 1.5, 2, 2.5
- Case dimensions: 115(L) x 50(W) x 31(D)mm





\$23.70

DURATECH

Qty 1+ \$19.95 Cat. TD-2110



DID YOU KNOW...

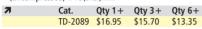
Johann Wolfgang Dobereiner (1780 - 1849) He determined the relation between elements and their atomic weight.

Spiral Drive Drill/Driver

This unit is reminiscent of drill/drivers of 50 years ago (before cordless drills). The unit consists of a collet-type chuck and handle with a spiral shaft. Pushing the handle towards the job causes the collet to rotate. This would enable a drill (or screwdriver bit for that matter) to very gently and slowly rotate. It is ideal for very fine work and does need some practice to perfect your technique.

- Includes 2 pin vice collets:
- O.3-1.0mm & 1.8-2.6mm

 Also 3 small drill bits in tubular case
- Measures: 180(L) overall (uncompressed) x 15(Dia.)mm



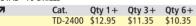
PC Drill Bit Pack - 10 Piece



Includes all the common types:

- 1 x 3.5mm for PC supports and relays
 2 x 1.2mm for PC pins and hook-up wire
- 3 x 1mm for resistors, capacitors, etc.
 4 x 0.8mm for ICs etc.

TOTAL - 10 DRILLS



Micro Drill Bit Set 0.7 - 2.2mm - 10 Piece

Every hobby engineer needs a set of micro drill bits in the workshop. Quality HSS in incremental sizes from 0.7 to 2.2mm

- · Sizes (one of each): 0.7mm. 0.8mm, 0.9mm, 1.0mm, 1.2mm, 1.4mm, 1.6mm, 1.8mm, 2.0mm, 2.2mm
- Has 3mm shank to easily fit most chucks

4	71	Cat.	Qty 1+	Qty 3+	Qty 6+
		TD-2407	\$14.95	\$13.35	\$11.70

20 Piece Micro Drill Set 0.3 - 1.6mm

20 micro drills in an indexing storage case, ideal for drilling wood, composites, plastic or soft metals

Indexed case enables removal of the bit you want without the risk of spilling them all over the place.

- Sizes: 0.3, 0.35, 0.4, 0.45, 0.5, 0.55, 0.6, 0.65, 0.7, 0.75, 0.8, 0.85, 0.9, 0.95, 1.0, 1.2, 1.3, 1.4, 1.6, 1.6mm

- Case size.	130(L) X 70(II) X 0(D)IIII		
7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2406	\$12.95	\$11.35	\$10.35

BUY IT ON THE WEB...

Shop for all these **Jaycar Electronics** products online at our website - and check out our latest products and special

offers!



Stepped Drill Bits



Drill multiple size holes with the one hit! You can drill through plastics and non-hardened metals (such as aluminium or copper sheeting etc) up to 4mm thick! Made from high speed steel (HSS), they will last for a very long time.

Two sizes available:

- 4 12mm drill in 1mm steps TD-2436
 12 20mm drill in 1mm steps TD-2438

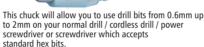
7	Cat.	Qty 1+	Qty 3+	Qty 6+
4 - 12mm	TD-2436	\$24.50	\$21.95	\$19.35
12 - 20mm	TD-2438	\$34.50	\$30.95	\$27.45

3/8" Precision **Keyless Drill Chuck**

Features an ergonomic design that gives a more powerful locking action and a patented 'Click Lock' system to indicate that the chuck is properly locked. The chuck's unique locking system makes it ideal for use on hammer drills and other high-vibration applications.

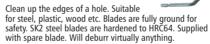
- 3/8" 24UNF mounting thread 1/32" 3/8" (0.8 10mm) drill capacity Suitable for drills up to 1,200 watts
- Cat. Qty 3+ TD-2011 \$14 95 \$13.35





7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2010	\$9.95	\$8.75	\$7.75

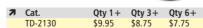
Deburring Tool



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1845	\$9.95	\$8.75	\$7.75

Tapered Reamer

This great tool is ideal for enlarging and shaping holes in plastic, thin metal and wood. Tapers from 3mm to 12mm and is made from high quality treated steel.



4 Piece Countersink Set

The easy way to deburr or countersink. Simply drill hole, insert tool with appropriate bit, and turn for a countersunk angle of 90°. Bits include 12, 16 and 19mm - all hardened carbon steel

4	7	Cat.	Qty 1+	Qty 3+	Qty 6+
		TD-2027	\$13.95	\$12.35	\$10.95

Double Ended Ti-N Countersink Bit 1 - 4mm

The best countersinking bits around. The design of the cutting face means that they last longer and are far easier to sharpen. They also clear chips quicker and more efficiently, so are suitable for production machining. The tip is titanium nitride coated and double-ended so when one end gets dull, flip it around and use the other end. Suitable for wood, plastics, ferrous and non-ferrous metals.

Qty 6+ Qty 3+ TD-2160 \$5.95 \$5.50 \$4.75

M3 & M4 Metric Taps

Clean up a cross threaded nut or cut a thread into a chassis or heatsink etc. High quality tool steel

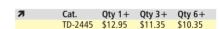


7	Cat.	Qty 1+	Qty 3+	Qty 6+
3mm	TD-2440	\$3.75	\$3.30	\$2.95
4mm	TD-2442	\$4.45	\$3.95	\$3.45

T-Type Tap Wrench

Can also be used with twist drills and reamers.

- Accepts shafts up to 5mm diameter
- 3 5mm
- Suits TD-2440 & TD-2442 above.





This is a versatile tool that will find many uses around the home or workshop. Great for cutting odd shapes in plaster, PVC pipe, PVC sheeting, leather, plastic and many other soft materials. The tool will trim holes to any radius and get into places where others won't. The blade measures 175mm long and the large, easy grip handle is 120 mm long.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-2127	\$15.95	\$14.35	\$12.70

10 Piece Needle File Kit

Every toolbox should have a set of needle files. This set contains every profile you could ever need. All have integrated plastic handles and come in a handy storage wallet. Each is 162mm long.

Profiles: Round

- Elliptical
- Half-round
- Double half round
- Triangle
- SquareFlat
- Flat tapered Knife
- Flat tapered safe back



7	Cat.	Qty 1+	Qty 3+	Qty 6+
10 Piece	TD-2128	\$14.95	\$13.35	\$11.70

HOBBY TOOLS

Micro Engraver



Engrave your valuables for security or insurance. The tiny diamond coated tip spins at 10,000 RPM so you can personalise tools, sporting gear, toys, security ID on valuables etc. Engraves glass, ceramics, metals and plastics. Batteries and case included.

- Tip is replaceable
- Dimensions: 160(L) x 15(Dia)mm
- Replacement tip sold separately Cat TD-2469

7	Cat.	Qty 1+	Qty 3+	Qty 6+
Micro Engraver	TD-2468	\$19.95	\$18.70	\$15.70
Spare Tip	TD-2469	\$6.95	\$6.50	\$5.50

60 Piece Rotary Tool Bit Set

All the bits you really need for your rotary tool to grind, polish, cut, sand or clean. All housed in a durable case with transparent lid and carry handle.

- Contents: Sanding belts 3 x 6mm Sanding belts 3 x 12mm 6pcs felt wheel 5 x diamond tip bits 12 x silicon carbide grinding wheel 36 x sanding disc 1 x wire brush
- 1 x silicon carbide dressing stone Collets and arbours for all attachments Buffing paste
 • Case size: 220(L) x 130(W) x 45(D)mm

Cat.





188 Piece Rotary Tool Accessories Pack

Anvone who owns one of those very useful rotary tools knows how much the replacement bits cost. At substantially lower cost than the hardware store brands and with 188 pieces, this kit will service every Contents:

Sanding arbours

- P80 sanding belts

- Sanding discs
 Collets: 2 x 3/32", 2 x 1/8"
 Drill bits: 2 x 1/16", 2 x 3/32"
- Grinding stones: 20 x 4mm wheel, 10 x 4mm wheel, 15 x 10mm cylinder, 12 x 10mm cylinder, 7 x 4mm cylinder, 20 x 10 bullet, 11 x 8mm tapered bullet,
- Tungsten carbide burrs: 3mm straight, ball profiles
- Diamond coated burrs: 4mm ball, 2mm fine cone taper, 3mm pinecone, 4mm cone
 Polishing wheels: 12, 25mm
- Steel, fibre wire brushes30mm cut-off wheels
- 20 x 4mm grinding wheels
- Paint-removing wheel
- 3/8" collet spanner, arbours, shafts, polishing compound.
 Case measures: 210(W) x 320(H) x 52(D)mm



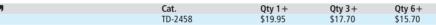
bit you will ever need. Everything is housed in a case so you can see

exactly where all the bits belong.



Qty3+ \$9.25





110 Piece 12V Rotary Tool Set

Drill, saw, sand, polish, carve or grind in your workshop or out on the road. 110+ bits and attachments cover every possible task you'll ever need. The rotary tool is rated for 12V at 12,000 RPM. Ideal for hobby or professional use

- Rotary tool: 12VDC, 16W, 12,000 RPM Attachments:
- Sanding belts 3 x 6mm
- 5 x Sanding Bands: 1/4" x 1/2"
 6 x Sanding bands: 1/2" x 1/2"
 4 x Collets: 1.6mm-2.3mm-3.2x2
- 1 x Dressing Stone 1"x 3/8"
- 1 x Felt Wheel Pointed: 3/8" x 3/4"

- 4 x Felts wheels
 2 x Rubber Emery Wheel
 4 x Felt Wheels: 1/2" x 1/4"
- 20 x Sand papers 2 x Felt Wheels: 1'x1/4"

- 1 x Cloth wheel 1"x 1/8"
- 2 x sanding shanks: 1/4"x1/2", 1/2"x1/2"
 4 x HSS Twist drills: 1.6mm x 2, 2.3mmx 2
- 3 x Mandrels For Wheel
- 5 x Diamond cutters
- 2 x HSS cutter
- 9 x Grinding wheels with Shank
- 3 x Brush
- 10 x Cutt off wheels
- Heavy duty: 0.8mm
 20 x cut off wheels regular: 0.4mm
- 1 x Polishing compound
- 1 x mini engraver

Cat.	Qty 1+	Qty 3+	Qty 6+
TD-2451	\$29.95	\$26.90	\$23.70



210 Piece Rotary Tool Kit with Flexible Shaft

Flexible shafts are particularly useful for porting heads in engines, but have a multitude of other applications where you need to get into a tight space or get more control of the bit. The kit consists of a powerful 32,000 RPM rotary tool that you can

Attachments

- Sanding arbours
- P80 sanding beltsSanding discs

- Collets: 2 x 3/32", 2 x 1/8"
 Drill bits: 2 x 1/16", 2 x 3/32"
 Grinding stones: 20 x 4mm wheel, 10 x 4mm wheel, 15 x 10mm cylinder,
- 12 x 10mm cylinder, 7 x 4mm cylinder, 20 x 10 bullet, 11 x 8mm tapered bullet,

 Tungsten carbide burrs: 3mm straight, ball profiles
- Diamond coated burrs: 4mm ball, 2mm fine cone taper, 3mm pinecone, 4mm cone
- Polishing wheels: 12, 25mmSteel, fibre wire brushes
- 30mm cut-off wheels 20 x 4mm grinding wheels
- Paint-removing wheel
 A 2/91 cellet appropriate and

- 3/0 Collet spailifel, albours, silarts, polisiling	g compound.			
71	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2459	\$39.95	\$37.45	\$31.90

Rotary Too

135W

Speed

Size

use with numerous attachments in the usual way, plus a 1m long flexible shaft. The flexible shaft attaches in seconds to give extra versatility. Suitable for modelmaking, automotive, workshop, art, jewellery or sculpture.



Tools – Glue Guns & Cleaners

GLUE GUNS

Mini Glue Gun - 240V

A glue gun is a handy tool to have around the house. Its fast, easy and simple to use with controlled glue feed

- Toys and models
- DecorationsFurniture
- Woodwork
- Cardboard etc.

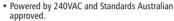
Plugs straight into 240V power point, Standards Australia approved, Use glue sticks with 7.4mm diameter Intermittent use only, not for production use.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1990	\$19.95	\$17.70	\$15.70



Large Glue Gun - 240V

Our mini glue gun was so popular we decided to import its big brother. This gun performs just as well as the smaller version but uses a 40% larger diameter glue stick for bigger jobs. Great for quick and easy low stress repairs to timber, cardboard, paper, and many household



Intermittent use only, not for production use.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1992	\$22.95	\$20.35	\$18.35

Glue Sticks

FOR MINI GUN

To suit the mini glue gun. Dimensions: 7.4mm dia. x 100mm long

Suits TH-1990 mini gun

FOR LARGE GUN

Dimensions: 11mm diameter x 100mm long.

• Suits TH-1992 gun

7			Cat.	Qty 1+	Qty 3+	Qty 6+
	Pkt 6	For Mini Gun	TH-1991	\$3.95	\$3.45	\$3.15
	Pkt 6	For Large Gun	TH-1995	\$4.95	\$4.45	\$3.90
	Pkt 50	For Mini Gun	TH-1994	\$9.95	\$8.75	\$7.75
	Pkt 45 approx.	For Large Gun	TH-1996	\$17.95	\$15.95	\$14.35

POWER SCREWDRIVERS

4.8 Volt Cordless Screwdriver

There are many cordless screwdrivers on the market, but few of them are as comfortable or easy to use as the little beauty. The driver has a comfortable pistol grip that gives you maximum control and allows your fingers to fall naturally on the forward/reverse control switch. The driver also has a bright LED lamp, a magnetic bit holder, and a handy security strap. There is even a handy LED battery level indicator that tells you





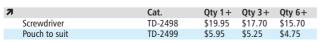
- Bit holder size: 6.35mm
- · Mains charger included

POUCH WITH BELT CLIP - SUIT TD-2498

Protect and keep your cordless screwdriver (TD-2498) within reach. This pouch has a strong metal belt clip, a Velcro strap to hold your drill in place and has 6 pockets at the front to store your drill bits.



Approximate dimensions: 100(W) x 115(H) x 65(D)mm



ULTRASONIC CLEANERS

Domestic Ultrasonic Cleaner

Suited to domestic use this ultrasonic cleaner cleans all your watches, jewellery, fountain pens, dentures, razor heads, printer heads, small silverware and small machined parts. Mains powered and easy to use. Fill the tank with water, add a mild cleaning solution and set the timer. The

LCD tells you how lo from 90 seconds up t			gs		
Specifications					
Tank volume	550ml		1	444 6	HHD.
Power consumption	50W			1	
	1 min 30 sec		2.0	100	
	3 min		-		7
Time settings	4 min 30 sec				
	6 min		4		
	7 min 30 sec				
7		Cat.	Qty 1+	Qty 3+	Qty 6+
		YH-5408	\$79.95	\$74.95	\$63.95

Ultrasonic Cleaner - Commercial

If you've been after an industrial ultrasonic cleaner but have been frightened off by the price, then this is for you! its massive 100W transducer produces millions of microscopic bubbles that are small enough to penetrate the most microscopic of crevices, cleaning them thoroughly. Use this cleaner for automotive injectors, jewellery, glasses, circuit boards and more! The unit features a large LED display with real time countdown. You can also set the cleaning time in 5 minute increments.

Specifications	
Power supply	240VAC 50/60Hz
Power	100 Watts
Tank capacity	3L
Tank dimensions	265 (L) x 160(W) x 235(H)mm
Unit dimensions	265 (L) x 160(W) x 245 (H) mm (including lid & basket)
Supplied with	1 x 1.5m IEC mains lead 1 x 250(L) x 155 (W) x 90(H)mm stainless steel basket 1 x stainless steel lid

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	YH-5410	\$399.00	\$359.00	\$319.00

CUSTOMERS PLEASE NOTE! TECHSTORE SPECIALS

SUPER BARGAINS ONLY AVAILABLE THROUGH TECHSTORE

Many of you who see our regular ads have made personal visits for some products not available to shop customers. These products are usually in such short supply there is simply not enough to distribute to all stores. Indeed some items could be as few as half a dozen. Such goods are sold through our "TECHSTORE". When we advertise these products, we box them in a special section marked off with 'TECHSTORE ONLY - NOT AVAILABLE IN RETAIL STORES'.

Unfortunately many do not notice this and become angry when the product is not in their local store. Please do not blame the local manager for this, he has no control, nor can he transfer stock from the TECHSTORE to his shop for you. If you wish to buy these items you must hurry and order direct to the TECHSTORE.



MAGNETS

Large Rare Earth Magnets - Pair

These rare earth magnets are exceptionally strong. They are made from NdFeB (Neodymium Iron Boron), providing the highest available magnetic energy of any material. Suitable for a wide variety of applications



for a wide variety of applications where a very strong magnet is required. In fact, these are the same magnets used in our Faraday shake torches. The nickel casing protects the magnets because the material is very brittle.

• Sold as a pair.

• Dimensions: 19mm dia x 28.2mm long

Grade: NdFeB, N35 Coating: Nickel

7	Cat.	Qty 1+	Qty 6+	Qty 20+
	LM-1652	\$29.95	\$26.90	\$23.70

Rare Earth Magnets with Mounting Holes

Super powerful rare earth magnets with 4.5mm countersunk mounting holes so you can fix them to your project to latch a door closed, etc.



Two types available:

Round 25(Dia) x 5mm	Cat. LM-1626
Rectangle 50(L) x 20(W)mm	Cat. LM-1628

7	Cat.	Qty 1+	Qty 6+	Qty 20+
	LM-1626	\$18.95	\$16.95	\$14.95
	LM-1628	\$24.95	\$22.35	\$19.70

Rare Earth Magnets



These magnets feature rare earth compounds combined with ferrite (anisotropic) to produce incredibly strong attraction/ repulsion. They are encased in nickel jackets because the material itself is very brittle. We warn you that getting a finger between these could result in a nasty pinch! They are provided with a nickel plated iron "keeper".

 Small - 10mm dia x 3mm - Pkt 4
 LM-1622

 Medium - 25mm dia x 5mm - Each
 LM-1618

7	Cat.	Qty 1+	Qty 6+	Qty 20+
	LM-1622	\$13.95	\$12.35	\$10.95
	LM-1618	\$17.95	\$15.95	\$14.35

RARE EARTH MAGNETS

Neodymium is a rare earth metal that dramatically increased in price in 2011. The bulk of world production



of Neodymium is from China and it is the element in our rare earth magnets that makes their magnetism so strong. The large increase in cost of Neodymium has dramatically affected the cost of our rare earth magnets. We have tried to absorb as much of the increase as possible, however the price increase was so large that we have no choice but to increase our prices. This is regretfully unavoidable and is because of the large cost increase of Neodymium.

Magnet Bars





Educational magnets. Ideal for hobbyists & children to learn more about magnetism.

• Each end is marked with "N" or "S".

Bar magnet - 70L x 12W x 5Dmm TH-1874 U Shaped - 30mm x 30mm TH-1873

7	Cat.	Qty 1+	Qty 6+	Qty 20+
	TH-1874	\$1.00	\$0.90	\$0.80
	TH-1873	\$1.00	\$0.90	\$0.80

Ferrite Magnets

Ideal for hobby and craftwork, school projects etc. Can be glued to wood, plastic rubber etc.

10L x 10W x 4Dmm - Pkt 12 LM-1616 20L x 15W x 5Dmm - Pkt 6 LM-1614

7	Cat.	Qty 1+	Qty 6+	Qty 20+	
	LM-1616	\$6.95	\$6.25	\$5.50	
	LM-1614	\$6.95	\$6.25	\$5.50	

Flexible Adhesive Magnetic Rubber Strip

This self adhesive magnetic rubber strip can be cut down to suit an application and makes an ideal fridge magnet for adhering to promotional material such as menus, calendars etc.

- Dimensions: 15(W) x 500(L)mm.
- 2mm thick.

7	Cat.	Qty 1+	Qty 6+	Qty 20+
	LM-1612	\$5.95	\$5.25	\$4.75

Handy Magnet Strip



You'll find dozens of uses for this innovative magnetic storage system. It's simplicity itself and can be attached to walls, tables or other surfaces to hold tools, brushes, scissors, key rings or any other object that contains iron.

7	Cat.	Qty 1+	Qty 6+	Qty 20+
	LM-1624	\$19.95	\$17.70	\$15.70

Tool Magnetiser / Demagnetiser

Magnetised screwdrivers make life easier. This tool has two slots, one which will magnetise and the other to demagnetise. The holes are large enough for the largest of screwdrivers



• 50 x 50 x 30mm.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2042	\$6.95	\$6.25	\$5.50

RELATED PRODUCT

Full range of PBC & Component Tools -Tweezers, Extraction Tools, Scribers, Punches etc see pages 131-132

Telescopic Magnetic Pickup Tool with LED



Sunday arvo, 5 o'clock and you drop the last bolt into the crankcase. No problem - with this handy tool, you can see where it is with the built-in LED torch and retrieve it with the magnetic tip. The torch comes on as soon as you extend it and it has a handy pocket clip so it doesn't get lost. A must for every toolbox.

- · Picks up over 100g in weight
- Batteries included
- Extends to 870mm
- 170mm long (closed)

7	Cat.	Qty 1+	Qty 6+	Qty 20+
	TH-1877	\$17.95	\$15.95	\$14.35

Super Extension Claw & Magnetic Pickup

Actually two tools. Tool No. 1 is a 600mm long flexible syringe-action claw gripper similar in operation to a pearl catch. The 4 prong gripper will capture an object up to 15mm in diameter with about 500g of gripping force. It is ideal for retrieving, say, a nut or screws in an engine compartment or piece of equipment. Tool No. 2 is the same thing except that it has a magnet on the end instead of a claw. We sell them as a set because they complement each other.

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other .		
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7	Cat.	Qty 1+	Qty 6+	Qty 20+
	TH-1868	\$8.95	\$7.95	\$6.95

Magnetic Telescopic Bar



A VERY HANDY TOOL!

This looks a bit like a telescopic TV antenna section with a clip to hold in your pocket. It has 7 extensions, and measures 640mm when extended and 127mm when closed. The tip on the end is a powerful magnet. It's ideal for picking up that dropped nut, screw or component etc from inside a piece of equipment. The magnet is strong, we picked up a screwdriver which weighed 60 grams.

7	Cat.	Qty 1+	Qty 6+	Qty 20+
	TH-1870	\$8.95	\$7.95	\$6.95

OTHER TOOLS

Inspection Mirror



Low cost inspection mirror.
Ideal for looking into hard to get places.
Length: 160mm. mirror diameter: 24mm.

7	Cat.	Qty 1+	Qty 3+	Qty 6+	
	TH-1872	\$4.95	\$4.45	\$3.90	

Forceps (Haemostats)



These clamps are made of stainless steel and can be locked on to the item they are holding. They are 130mm long, so they are ideal to reach into hard-to-get-at places. Also great for holding components etc., whilst soldering

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1755	\$8.95	\$7.95	\$6.95

If you have ever attempted any repair or improvement on your gaming console, you know that the right tools can make the difference between a good experience and a bad one. Everything you need to get into your console and accessories. It includes tools for pretty much every console and handheld on the market today WII®, X-Box®, Playstation® etc. Carry case included.

- PHOOD PHOD PHO PH1
- Slotted 2, 3, 4mm
- T4, T5, T6, T8, T10, T15, T20 TA2, TA2.3
- TRIOO, TRIO, TRI1
- Nintendo® & X-Box® security bits
- X-Box® opening tool Stainless tweezers
- · Ratchet handle and adaptor



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2109	\$29.95	\$27.95	\$23.70

TOOL KITS

Tool Set Repair Kit for iPhone®

The tools you need to safely open up your iPhone® and put it back together again. Suits iPhone® 3G, 3GS & 4G.

- 2 x Plastic opening levers
- 1 x Guitar Pick Opening Tool
- 1 x Pentalobe Screwdriver TS1
 1 x Phillips Screwdriver PH00
- 1 x Suction Cap
- 1 x Sim card ejector pin tool
 1 x Phone mounting bracket / Screw hold marker

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2112	\$12.95	\$11.35	\$10.35

6 Piece Stainless Steel **Foldout Bicycle Toolset**

A compact stainless steel bike tool set measuring in at a handy 70mm. It contains all the drivers you need for quick repairs and adjustments making it an essential tool for any cyclist.

- 3 4 5 6mm hex 5mm flat screwdriver
- · Philips screwdriver
- Dimensions: 70(L) x 25(W)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2176	\$19.95	\$18.70	\$15.70

30 Piece Tool Kit with Case

Minor DIY repairs are a breeze with this 30 piece tool kit and every DIYer should have one of these in easy reach. The tools are held securely in a zip-up case.

Contents:

- Side cutters
- Long nose pliers Snap-blade knife
- Tape measure
- Precision screwdriver with bits
- Driver handle with: PH1, PH2, PZ1, PZ2, 5, 6mm slotted, T10, T15, T20
 5, 6, 7, 8, 9, 10mm sockets
 Folding Allen keys 1.5, 2, 3, 4, 5, 6mm
 Case measures 210(L) x 160(W) x 48(H)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2166	\$24.95	\$22.35	\$19.70

Computer Service Tool Kit

Kit includes:

- IC inserter/extractor
- Tweezers
 1/4" Nutdriver
- 3/16" Nutdriver
- Parts tube for storage
- Pearl Catch
- Double ended 10/15 torx driver
 #0 Phillips screwdriver
- Zipper case
- #1 Phillips screwdriver 1/8" Slotted screwdriver
- 3/16" Slotted screwdriver



LOOKING FOR STORAGE CASES?

Ideal for carrying small components. See through plastic construction enables the contents to be easily identified.





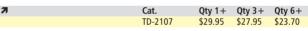


30 Piece Electronic Tool Kit

An electronic tool kit with all the essentials - cutters, pliers, screwdrivers etc. Ideal kit for computer service people, IT etc

Contents: 3.5" Sidecutters

- 4" Pliers
- Tweezers
- Ratchet driver handle
- Extension bit holder Slotted: 1, 1.5, 2, 2,5, 3mm
- Phillips: 000, 00, 0, 1, 1, Torx: T4, T5, T6, T7, T8, T9, T10
 Nut drivers: M2.5, 3, 3.5, 4, 4.5
- Hex: H0.7-H0.9-H1.3-H1.5
- See though storage case
 Case size: 210(L) x 140(W) x 38(D)mm

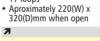


TOOL CASES & BOXES

Multi-storage Tool Case

Make up your own tool kits? Our computer service tool kits are supplied in these cases. They are made from vinyl and have a zipper to keep them closed. Inside, there is a number of elastic loops to hold the tools in place.









Cat. HB-6390 \$8.75 \$7.75

4 Tray Tool/Storage Case

On-site storage of parts, tools, fishing tackle or anything else you need to tote around. Each compartment has a 233 x 122 x 32mm 13 compartment storage box for small items with dividers that can be removed to accommodate larger things. All the hinges and catches are the durable pintle type, not a flimsy bit of folded plastic that will snap after a week. The top tray has a generous 265 x 160 x 65 space for ancillary items and it's finished in a tasteful shade of industrial yellow and black.

• Dimensions: 270(W) x 260(H) x 150(D)mm



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	HB-6302	\$16.95	\$14.95	\$13.35

TOOL & INSTRUMENT CASES

Aluminium Attaché Case

High quality, all silver case, supplied with tool pallet, which can be removed if not required. Lid includes a document holder and the padded case includes 5 dividers that can be rearranged or removed. Lockable and includes two keys.

• Size 450(W) x 320(D) x 145(H)mm



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	HB-6352	\$59.95	\$53.95	\$47.90

Foam Insert Aluminium Attaché Cases

Ideal for Camera, Video and Test Equipment, these cases feature removable 15mm square foam pieces so you can make a hole to the exact size of your valuable equipment. The lid also has a foam insert for complete protection. Cases are lockable and supplied with two keys. Great for wine and glasses also.



Qty 10+ HB-6355 Small \$39.95 \$35.90 \$31.90 HB-6356 Large \$69.95 \$62.95 \$55.95

ABS INSTRUMENT CASES WITH PURGE VALVES

These robust cases come with purge valves for an airtight seal, ribbed ABS construction, stainless steel hinge pins, O-ring seals and very solid catches. The lids are lined with removable egg-shell foam and they come with pluck foam insert with an extra layer of egg-shell foam. These are truly exceptional cases that you should have no qualms about entrusting your camera gear, test, medical or scientific equipment.

• 3 year warranty

ABS INSTRUMENT CASE MPV1

Tiny size for small instruments or test

Dimensions

Internal: 185(W) x 120(D) x 75(H)mm External: 210(W) x 165(D) x 90(H)mm

Cat. HB-6388

ABS INSTRUMENT CASE MPV2

Small size for a single SLR camera, DMM or other test equipment.

Internal: 300(W) x 218(D) x 105(H)mm External: 305(W) x 228(D) x 115(H)mm

Cat. HB-6381



ABS INSTRUMENT CASE MPV4

Medium size to take extra camera and lenses or larger gear such as oscilloscopes or multiple pieces of test equipment.

Dimensions:

Internal: 400(W) x 322(D) x 145(H)mm External: 410(W) x 332(D) x 155(H)mm Cat. HB-6383



Freecall order hotline: 1800 022 888

ROADIES CASE

ABS Roadie's Case

A sturdy ABS case to take all the bits and pieces musos and roadies take to gigs. It has ample room for leads, manuals, tools, spare strings etc, and is foam lined to provide protection for spare valves. Solid pintle hinges and cam closures.

Dimensions: 520(L) x 428(W) x 200(D)mm



Cat.	Qty 1+	Qty 4+	Qty 10+
HB-6379	\$79.95	\$71.95	\$63.95

DISCOUNT TRADE CARD

If you regularly purchase electrical or electronic goods to be used for business purposes you may qualify for a **Jaycar Electronics Trade Card** which entitles you to substantial discounts on most Jaycar products. Discounts range from 5% to 30% depending on the type and quantity of product purchased. **Excludes Kits & Books.**

* ABN will be required - see our website or Store Manager for further details.



DID YOU KNOW...

Niels Bohr (1885 - 1962)

In 1922, he won the Nobel Prize for Physics. He developed the "Bohr theory of the atom and liquid model of the atomic nucleus".

ABS INSTRUMENT CASE MPV7

Large size. This case also has moulded slots to take dividers and two layers of pluck foam. It's also deep enough to take a pro SLR camera body.

Internal: 480(W) x 355(D) x 180(H)mm External: 490(W) x 365(D) x 190(H)mm

Cat. HR-6385





ABS INSTRUMENT ROLLING CASE MPV8

Ideal for the travelling professional. Like a conventional piece of luggage, it has a retractable handle and built-in wheels to take the load. It's also carry-on size.

Dimensions Internal: 512(W) x 292(D) x 180(H)mm External: 522(W) x 302(D) x 190(H)mm Cat. HB-6387



-					
7		Cat.	Qty 1+	Qty 4+	Qty 10+
MPV1	NEW	HB-6388	\$39.95	\$35.90	\$31.90
MPV2		HB-6381	\$69.95	\$62.95	\$55.95
MPV4		HB-6383	\$99.95	\$89.95	\$79.95
MPV7		HB-6385	\$129.00	\$115.95	\$102.95
MPV8		HB-6387	\$189.00	\$169.95	\$150.95

Digital Multimeters

Multimeters just get better and better. We have only made a few changes this year. Additions really. Have a look at the QM-1502 - less than the price of a sandwich! Who would have thought that you could buy a 10Amp meter for less than \$5? Thank you exchange rate.

The exchange rate, of course has no bearing on quality. As you can see most of our meters have a Lifetime Warranty. These products are a fraction of the price of those ridiculously expensive American brands - why would you buy them?

Our popular Digital Storage Oscilloscope has been improved at no additional cost, and we have an interesting new function generator on page 164.

We also have a new (and very useful) non-contact voltage tester with a handy torch in it - see page 168. Clever.

All-in-all a thorough consolidation on an already solid lineup.



DIGITAL MULTIMETERS

COMPARISON GUIDE

LIFET	IME GUAI	RANTEE
U T	ITE O	This lo

This logo indicates that the product has a lifetime guarantee. Why would you buy a multimeter from anyone else?

Cat	QM-1502	QM-1500	QM-1523	QM-1524	QM-1328	QM-1327	QM-1323	QM-1496	QM-1546	QM-1548	QM-1498	QM-1444	QM-1549	XC-5078	QM-1594	QM-1571	QM-1543	QM-1575	QM-1493
Display (Count)	2000	2000	2000	2000	4000	4000	4000	6000	2000	2000	3400	4000	4000	2000	400	4000	40000	40000	4000
Security Category	Cat II 500V	Cat II 500V	Cat II 600V																
Backlight			•	•		•	•					•	•		•	•	•	•	•
Bargraph											•						•	•	•
Auto-range				•	•	•	•	•			•		•	•	•	•	•	•	
True RMS													•			•	•	•	
VDC	500V	1000V	500V	600V	600V	600V	600V	600V	1000V	1000V	600V	600V	1000V	600V	250V	1000V	1000V	1000V	1000V
VAC	500V	750V	500V	600V	600V	600V	600V	600V	750V	750V	600V	600V	1000V	600V	250V	1000V	1000V	1000V	750V
ADC	10A	10A	10A	10A	200mA	10A	10A	10A	10A	10A	340mA	10A	10A	200mA	10A	10A	10A	10A	
AAC				10A	200mA	10A	10A	10A	10A	10A	340mA	10A	10A	200mA	10A	10A	10A	10A	
Resistance	2M	2M	2M	2M	40M	40M	40M	60M	20M	200M	34M	40M	40M	20M	20M	40M	40M	40M	400R
Capacitance					100uF	200uF	100μF	60000μF		200uF		100uF	200uF			200uF	40mF	40mF	
Frequency					10MHz	10MHz	10MHz					10MHz	10MHz			10MHz	10MHz	10MHz	
Inductance										20H									
Temperature						1000°C	760°C			1000°C		760°C				760°C	760°C	1200°C	
Tachometer												•							
Duty Cycle					•	•	•					•	•			•		•	
Dwell												•							
Continuity			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Diode Test	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Transistor Test	•	•	•							•									
Interface																•		•	
Data Logger																•		•	
Relative Measurement					•		•					•	•		•	•	•	•	
Data Hold			•	•	•	•	•			•	•	•	•	•	•	•	•	•	•
Min / Max Hold											Max Hold			Max hold		•	•	•	
Non Contact Voltage							•								•	•			
IP67																•	•	•	
Low Battery	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Page	152	152	152	153	153	154	154	154	155	155	156	156	156	157	157	157	158	158	158

2000 COUNT, 5000 COUNT - WHAT DOES IT ALL MEAN?

For the first time user, the specifications on a DMM can be very confusing, particularly the display specifications.

Or what does 2000 count mean?

DMMs display readings to several decimal places, depending on the accuracy, and the number of digits is the display span of the meter. A basic DMM may appear to have 4 digits, but the maximum reading it will display 1999. On the 2V range, for example, the display will read a maximum of 1.999 before it switches to a higher range – assuming it's an autoranging meter. Because the most significant digit can only indicate 1 (1.999), it's called half a digit, so most DMMs have a 3.5 digit display. A meter that can read up to 3999 before it changes ranges has a 4000 count display. Safety categories can also cause confusion:

Cat I

Applies to circuits not connected to mains voltage
Circuits directly connected to mains voltage such as household appliances
Circuits connected to mains voltages in a building
installation – mains wiring, switchboards etc.
The source of the mains voltage installation – power lines, Cat II

Cat III

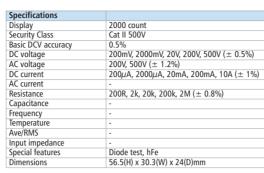
transformers and sub-stations

You'll notice that some DMMs have more than one rating. This isn't a misprint or a mistake. Remember that the category refers to the nature of the installation, not necessarily only the voltage in the installation. For example, a Cat III installation may include three phase voltages of 415V and single phase of 240V. A device rated for Cat II 600V is not suitable for use on this installation, in spite of the fact that its voltage rating is suitable – a Cat III device rated above the specified voltage is required.

Mini DMM

- 2000 Count
- Transistor test
- Diode Test
- 10A DC current
- · Ideal first meter
- Compact size

A fantastic little multimeter at a bargain price. Great for the hobbyist, student, or person who needs a cheap and quick way to check a few basic electronic measurements. Keep one in your car glove box or front shirt pocket. Test probes included.





JAYCAR QUALITY **ALL METERS INCLUDE QUALITY TEST LEADS**



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1502	\$4.95	\$4.45	\$3.90

Low Cost DMM

- 19 Range
- 2000 Count
- · Transistor test
- Diode Test

E MEASUREMENT

- 10A DC current
- · Ideal first meter
- · Compact size

PERFECT FIRST METER

This is a full featured meter with plug-in 4mm probes AND transistor tester. This is the ideal first multimeter, and will give years of faithful service, in fact, you will only need to replace this meter if you require a unit with very high input impedance.

Specifications	
Display	2000 count
Security Class	Cat II 500V
Basic DCV accuracy	0.500%
DC voltage	200mV, 2V, 20V, 200V, 1000V (± 0.5%)
AC voltage	200V, 750V (Max input 750V RMS) (± 1.2%)
DC current	200uA, 2mA, 20mA, 200mA, 10A (± 1.2%)
AC current	-
Resistance	200R, 2k, 20k, 200k, 2M (± 1.2%)
Capacitance	-
Frequency	-
Inductance	-
Temperature	-
Ave/RMS	Ave
Input impedance	1M
Special features	Transistor test
Dimensions	125(H) x 68(W) x 23(D)mm
Qty 1+	Qty 3+ Qty 6+



ALL METERS INCLUDE



QUALITY TEST LEADS	WARRANTS	Dimensions		
7	Cat)+	
A/	cut.	,	۲L,	

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1500	\$9.95	\$8.75	\$7.75

Specifications

Display Security Class

DC voltage AC voltage

DC current

AC current

Resistance

Capacitance Frequency Inductance

Temperature Ave/RMS

Input impedance

Special features Dimensions

Basic DCV accuracy

Data Hold DMM with Backlight

CAT II 600V

- 20 range
- 2000 Count
- Transistor test
- Diode test
- 10A DC current
- Data hold
- Backlight
- · Low battery warning
- · Continuity beeper
- · Holster with stand

ALL METERS INCLUDE **QUALITY TEST LEADS**



LIEFR

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1523	\$14.95	\$13.35	\$11.70

Freecall order hotline: 1800 022 888

A handy digital multimeter with lots of features at a great price. Has all the features you would expect including holster and probes included. Excellent for those just learning about DMMs.

200mV, 2V, 20V, 200V, 500V (± 0.8%)

200R, 2k, 20k, 200k, 2M (± 1%)

Transistor test, data hold, backlight 145(H) x 65(W) x 35(H)mm

200uV, 2mV, 20mV, 200V, 500V (± 1.2%)

200uA, 2mA, 20mA, 200mA, 10A (± 1%)

2000 count

Cat II 600V

0.800%

Ave

10M



Digital Multimeters

Cat II Autoranging DMM

- CAT II 600V
- 2000 Count
- Data hold
- Back light
- _...
- Diode test
- · Holster with stand & test probes

This CAT II DMM is suitable for voltages up to 600VAC and has 15mm high digits for easy reference.

Features include: Overload protection, 10A current, diode check Supplied with: Rubber holster, High quality leads

Display	2000 count
Security Class	Cat II 600V
Basic DCV accuracy	0.800%
DC voltage	200mV, 2V, 20V, 200V, 600V (±0.8%)
AC voltage	200uV, 2mV, 20mV, 200V, 600V (± 1%)
DC current	200uA, 2mA, 20mA, 200mA, 10A (± 3%)
AC current	200uA, 2mA, 20mA, 200mA, 10A (± 3%)
Resistance	200R, 2k, 20k, 200k, 2M (± 1.5%)
Capacitance	-
Frequency	-
Inductance	-
Temperature	-
Ave/RMS	Ave
Input impedance	10M
Special features	Data hold, backlight
Dimensions	140(H) x 70(W) x 31(H)mm







7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1524	\$19.95	\$17.70	\$15.70

Analogue Multimeter

- Transistor test
- · Holster included
- Audible continuity

Digital multimeters have almost completely taken over, but there are those who prefer to use the old analogue meter - it's still the best way to test a capacitor. This well-made meter has audible continuity and a transistor test, in addition to the normal set of functions. Have a closer look at this meter. It's a beauty, the picture on the right does not do it justice.

Display	-
Security Class	-
Basic DCV accuracy	3.000%
DC voltage	100mV, 500mV, 2.5V, 10V, 50V, 250V, 1000V (±3.0%)
AC voltage	10V, 50V, 250V, 1000V (±4.0%)
DC current	50uA, 2.5mA, 25mA, 250mA (±3.0%)
AC current	-
Resistance	2k, 20k, 200k, 2M, 20M (±3.0%)
Capacitance	-
Frequency	-
Inductance	-
Temperature	-
Ave/RMS	Ave
Input impedance	10M
Special features	dB, continuity buzzer.
Dimensions	150(L) x 100(W) x 35(D)mm





7	Cat.	Qty 1+	Qty 3+	Qty 6+
	OM-1020	\$24.95	\$22.35	\$19.70

Autoranging Pocket DMM

- Autoranging
- Removable leads
- Auto power-off
- Data hold & relative function
- Capacitance
- Frequency
- Pocket sized

A handy little pocket DMM with plenty of features. Large LCD display with
4000 count, autoranging measurement with data hold and relative functions,
and with replaceable leads make this a perfect companion to any technician, field engineer, mechanic, or even a handyman. Also does capacitance, frequency and duty cycle.

	Specifications	
	Display	4000 count
	Security Class	Cat III 600V
	Basic DCV accuracy	1.000%
	DC voltage	400mV, 4V, 40V, 400V, 600V (±1.0%)
	AC voltage	4V, 40V, 400V, 600V (±1.5%)
	DC current	40mA, 200mA (±1.5%)
	AC current	40mA, 200mA (±2.5%)
	Resistance	400R, 4k, 40k, 400k, 4M, 40M (±1.0%)
	Capacitance	4nF, 40nF, 400nF, 4uF, 40uF, 100uF (±3.0%)
	Frequency	up to 10MHz (±1.5%)
	Inductance	-
	Temperature	-
	Ave/RMS	Ave
ì	Input impedance	10M
1	Special features	Pocket size, removable leads, data hold, relative function
	Dimensions	115(H) x 60(W) x 16(D)mm





7	Cat.	Qty 1+	Qty 3+	Qty 6+
*	Cat.	Qty i⊤	Qty 5⊤	Qty o⊤
	QM-1328	\$29.95	\$26.90	\$23.70



Cat III 4000 Count **Autoranging DMM**

- Autoranging
- · Data hold
- Auto power-off
- Temperature
- Backlit display

An accurate and easy to use autoranging DMM. Just select the parameter you want to measure and the meter chooses the appropriate display range. Backlit display helps for measuring in dark places, whilst temperature, capacitance, data hold and auto power off round out the features.

	Specifications	
		1000
	Display	4000 count
	Security Class	Cat III 600V
	Basic DCV accuracy	0.500%
	DC voltage	400mV, 4V, 40V, 400V, 600V (±0.5%)
	AC voltage	4V, 40V, 400V, 600V (±0.5%)
	DC current	400uA, 4mA, 40mA, 400mA (±1.0%), 10A (±3.0%)
	AC current	400uA, 4mA, 40mA, 400mA, 10A (±1.0%),
	Resistance	400R, 4k, 40k, 400k, 4M, 40M (±0.8%)
	Capacitance	4nF, 40nF, 400nF, 4uF, 40uF, 200uF (±3.0%)
	Frequency	0.1Hz~10MHz (±0.5%)
	Inductance	-
	Temperature	-20°C to +1000°C (±3.0%)
	Ave/RMS	Ave
á	Input impedance	10M
•	Special features	Temperature, frequency, backlight
	Dimensions	150(H) x 70(W) x 50(D)mm

ALL METERS INCLUDE QUALITY TEST LEADS



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	OM-1327	\$34.95	\$31.45	\$27.90

Cat III DMM with Temperature

- · Non-contact voltage
- Duty cycle
- Backlight
- Rugged moulded case

A budget-priced meter with everything you need - capacitance, temperature and 10A on AC and DC, compact and light weight with rugged moulded case.

Specifications	
Display	4000 count
Security Class	Cat III 600V
Basic DCV accuracy	0.500%
DC voltage	400mV, 4V, 40V, 400V, 600V (±0.5%)
AC voltage	400mV, 4V, 40V, 400V, 600V (±1.2%)
DC current	4mA, 40mA, 400mA, 10A (±2.5%)
AC current	4mA, 40mA, 400mA, 10A (±3%)
Resistance	400R, 4k, 40k, 400k, 40M (±0.8%)
Capacitance	4nF, 40nF, 4μF, 40μF, 100μF (±3%)
Frequency	4kHz, 40kHz, 400kHz, 4000kHz, 10MHz (±1.5%)
Inductance	-
Temperature	-20°C to +760°C (±3%)
Ave/RMS	Ave
Input impedance	10M
Special features	Non-contact voltage, duty cycle, backlight
Dimensions	138(H) x 68(W) x 37(D)mm

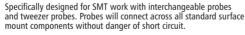


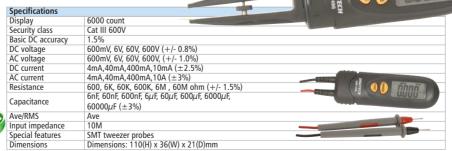
7	Cat.	Qty 1+	Qty 3+	Qty 6+
	OM-1323	\$39.95	\$35.90	\$31.90

Freecall order hotline: 1800 022 888

Autoranging SMT DMM

- Autoranging
- Continuity test
- · Auto power-off









ALL METERS INCLUDE QUALITY TEST LEADS	GUARANTEE	Input imp Special fe Dimension
7	Cat.	

Qty 1+ \$39.95 QM-1496





DIGITECH



Cat III Dynamo **Powered DMM**

- No batteries required
- Capacitance
- Frequency
- Data Hold
- 10A Current



QM-1547

NO BATTERIES REQUIRED

JAYCAR QUALITY **ALL METERS I QUALITY TES**

INCLUDE T LEADS	TITLE

Just crank the handle for 10 seconds to provide power for about 10 minutes operation. Ideal for electrical emergencies on the car or boat - the last thing you need to be thinking about is how old the battery in the multimeter is.

Specifications	
Display	4000 count
Security class	Cat III 600V
Basic DC accuracy	1.0%
DC voltage	400mV, 4V, 40V, 400V, 600V (±1%)
AC voltage	4V, 40V, 400V, 600V (±2.5%)
DC current	400μA, 4000μA, 40mA, 400mA, 4A, 10A (±3.5%)
AC current	400μA, 4000μA, 40mA, 400mA, 4A, 10A (±3.5%)
Resistance	400R, 4k, 40k, 400k, 4M, 40M (±3%)
Capacitance	40nF, 400nF, 4μF, 40μF, 100μF (±3%)
Frequency	4Hz, 40Hz, 400Hz, 4kHz, 40kHz (±0.3%)
Ave/RMS	Ave
Input impedance	10M
Special features	Data hold, diode and continuity test
Dimensions	152(L) x 78(W) x 45(D)mm



LOOK!

A solar cell. It

never needs a battery change!

Rechargeable Solar DMM

- · Recharge with solar low voltage DC or mains power
- Rapid recharge
- Integrated holster
- Diode test
- · Audible continuity
- Fused 10A range









An environmentally friendly DMM with rechargeable batteries that can be charged from the built-in solar panel, 12-36VDC or from mains power. Never have to buy batteries again.

Qty 1+ \$39.95

Specifications	
Display	2000 count
Security Class	Cat III 600V
Basic DCV accuracy	0.500%
DC voltage	200mV, 2V, 20V, 200V, 1000V (±0.5%)
AC voltage	2V, 20V, 200V, 750V (±0.8%)
DC current	200uA, 2mA, 20mA, 200mA, 10A (±1%)
AC current	200uA, 2mA, 20mA, 200mA, 10A (±1.2%)
Resistance	200R, 2k, 20k, 200k, 20M (±0.8%)
Capacitance	-
Frequency	-
Inductance	-
Temperature	-
Ave/RMS	Ave
Input impedance	10M
Special features	Rechargable, low impedance mode
Dimensions	179(L) x 88(W) x 39(D)mm

1	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1546	\$69.00	\$61.95	\$54.95

Cat III Inductance/ **Capacitance DMM**

- · Hfe transistor test
- Inductance
- Capacitance
- Auto power-off
- 10A AC & DC current
- Diode test
- · Audible continuity
- Data hold

JAYCAR QUALITY	I I FE
ALL METERS INCLUDE	TITLE
QUALITY TEST LEADS	GUARANTEE



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A feature packed DMM with wide range of inductance and capacitance measurement which are measured via the standard probes. Ideal for audio enthusiasts designing their own crossovers. Features large LCD, auto power-off and temperature measurement.

	Specifications				
	Display	2000 coun	t		
	Security Class	Cat III 600	V		
	Basic DCV accuracy	0.500%			
	DC voltage	200mV, 2V	, 20V, 200V, 1	000V (±0.5%)	
	AC voltage	200mV, 2V	, 20V, 200V, 7	50V (±0.5%)	
	DC current	20mA, 200	mA (±1.0%)	10A (±2.0%)	
	AC current	2mA, 200r	nA (±1.0%),	10A (±3.0%)	
	Resistance	200R, 2K, 2	20K, 200K, 2N	1, 20M (±0.8%), 20	00M (±5.0%)
	Capacitance	20nF, 200nF, 2uF, 200uF (±4.0%)			
	Frequency	-			
	Inductance	20mH, 200	mH, 2H, 20H	(±3.0%)	
	Temperature	-20°C to +	1000°C (±3.	0%)	
	Ave/RMS	Ave			
	Input impedance	10M			
	Special features	Hfe test, te	mperature, in	ductance	
	Dimensions	195(H) x 9	2(W) x 55(H)m	ım	
EE.					
Cat.	Qty 1	+	Qty 3+	Qty 6+	
OM-15			\$44.90	\$39.90	
QIVI-13	949.9)	\$44.9U	\$39.9U	



Pro-Style Pen DMM

- AC/DC Voltage
- AC/DC Current
- Continuity
- Resistance
- Diode Test
- · Rugged Housing

being able to look at where your probes are to see the reading. No need to look away to where your DMM is located because it's right there in your hand. This precision instrument is made using modern double moulding techniques to make it tough enough to be used every day and includes nifty features like having a spot to put the probe guard when in use. 7 functions in the one unit.

Specifications

Display

3400 count

This ruggedly designed and built pen styled DMM gives the flexibility of

Specifications	
Display	3400 count
Security Class	Cat III 600V
Basic DCV accuracy	0.800%
DC voltage	300mV, 3V, 30V, 300V, 600V (±0.8%)
AC voltage	300mV, 3V, 30V, 300V, 600V (±1.2%)
DC current	30mA, 340mA (±1.5%)
AC current	30mA, 340mA (±2.0%)
Resistance	300R, 3k, 30k, 300k, 3M, 34M (±3.0%)
Capacitance	-
Frequency	-
Inductance	-
Temperature	-
Ave/RMS	Ave
Input impedance	10M
Special features	Backlight, data hold, relative measurement.
Dimensions	230(L) x 35(W) x 20(D)mm





Cat.	Qty 1+	Qty 3+	Qty 6+
QM-1498	\$49.95	\$44.90	\$39.90

Automotive DMM with Inductive Pickup

- RPM x1, x10
- Inductive pickup for RPM
- Dwell angle
- Resistance
- DC volts

MEASUREMENT

姐

- Temperature
- Frequency
- Duty cycle %
- Data hold and relative function
- Probes, alligator clip probes and holster included

A multimeter for all your automotive diagnostic needs. Features an inductive pickup for RPM measurement, dwell angle, frequency, duty cycle, data hold, relative function, backlit display and temperature, and works with engines of 2 to 10 cylinders. An absolute must have for the backyard mechanic or qualified tradesperson alike.

AC current 400uA, 4mA, 40mA, 40mA (±1.8%), 4A, 10A (±3.0%) Resistance 400R, 4k, 40k, 400k, 4M, 40M (±1.2%) Capacitance 40nF, 400nF, 4uF, 40uF, 100uF (±3.0%) Frequency 5Hz~10MHz (±1.2%) Inductance - Temperature -20°C to +760°C (±3.0%) Ave/RMS Ave Input impedance 10M	Specifications	
Basic DCV accuracy 1.500% DC voltage 400mV, 4V, 40V, 400V, 600V (±1.5%) AC voltage 4V, 40V, 400V, 600V (±1.5%) DC current 400uA, 4mA, 40mA, 400mA (±1.5%), 4A, 10A (±2.5% AC current 400uA, 4mA, 40mA, 400mA (±1.8%), 4A, 10A (±3.0% Resistance 400R, 4k, 40k, 400k, 4M, 40M (±1.2%) Capacitance 40nF, 400F, 4uF, 100uF (±3.0%) Frequency 5Hz~10MHz (±1.2%) Inductance - Temperature -20°C to +760°C (±3.0%) Ave/RMS Ave Input impedance 10M	Display	4000 count
DC voltage 400mV, 4V, 40V, 400V, 600V (±1.5%) AC voltage 4V, 40V, 400V, 600V (±1.5%) DC current 400uA, 4mA, 40mA, 400mA (±1.5%), 4A, 10A (±2.5% AC current 400uA, 4mA, 40mA, 400mA (±1.8%), 4A, 10A (±3.0%) Resistance 400R, 4K, 40K, 400K, 4M, 40M (±1.2%) Capacitance 40nF, 400nF, 4uF, 40uF, 100uF (±3.0%) Frequency 5Hz~10MHz (±1.2%) Inductance - Temperature -20°C to +760°C (±3.0%) Ave/RMS Ave Input impedance 10M	Security Class	Cat III 600V
AC voltage 4V, 40V, 400V, 600V (±1.5%) DC current 400uA, 4mA, 40mA, 400mA (±1.5%), 4A, 10A (±2.5% AC current 400uA, 4mA, 40mA, 400mA (±1.8%), 4A, 10A (±3.0% Resistance 400R, 4k, 40k, 400k, 4M, 40M (±1.2%) Capacitance 40nF, 4uF, 40uF, 100uF (±3.0%) Frequency 5Hz~10MHz (±1.2%) Inductance - Temperature -20°C to +760°C (±3.0%) Ave Input impedance 10M	Basic DCV accuracy	1.500%
DC current 400uA, 4mA, 40mA, 400mA (±1.5%), 4A, 10A (±2.5% AC current 400uA, 4mA, 40mA, 400mA (±1.8%), 4A, 10A (±3.0% Resistance 400R, 4k, 40k, 400k, 4M, 40M (±1.2%) Capacitance 40nF, 400nF, 4uF, 40uF, 100uF (±3.0%) Frequency 5Hz~10MHz (±1.2%) Inductance - Temperature -20°C to +760°C (±3.0%) Ave Input impedance 10M	DC voltage	400mV, 4V, 40V, 400V, 600V (±1.5%)
AC current 400uA, 4mA, 40mA, 40mA (±1.8%), 4A, 10A (±3.0%) Resistance 400R, 4k, 40k, 400k, 4M, 40M (±1.2%) Capacitance 40nF, 400nF, 4uF, 40uF, 100uF (±3.0%) Frequency 5Hz~10MHz (±1.2%) Inductance - Temperature -20°C to +760°C (±3.0%) Ave/RMS Ave Input impedance 10M	AC voltage	
Resistance 400R, 4k, 40k, 40k, 40M, 40M (±1.2%) Capacitance 40nF, 40onF, 4uF, 40uF, 100uF (±3.0%) Frequency 5Hz~10MHz (±1.2%) Inductance - Temperature -20°C to +760°C (±3.0%) Ave Ave Input impedance 10M	DC current	400uA, 4mA, 40mA, 400mA (±1.5%), 4A, 10A (±2.5%)
Capacitance 40nF, 400nF, 4uF, 40uF, 100uF (±3.0%) Frequency 5Hz~10MHz (±1.2%) Inductance - Temperature -20°C to +760°C (±3.0%) Ave/RMS Ave Input impedance 10M	AC current	400uA, 4mA, 40mA, 400mA (±1.8%), 4A, 10A (±3.0%)
Frequency 5Hz~10MHz (±1.2%) Inductance - Temperature -20°C to +760°C (±3.0%) Ave/RMS Ave Input impedance 10M	Resistance	400R, 4k, 40k, 400k, 4M, 40M (±1.2%)
Inductance	Capacitance	40nF, 400nF, 4uF, 40uF, 100uF (±3.0%)
Temperature -20°C to +760°C (±3.0%) Ave/RMS Ave Input impedance 10M		5Hz~10MHz (±1.2%)
Ave/RMS Ave Input impedance 10M	Inductance	-
Input impedance 10M	Temperature	-20°C to +760°C (±3.0%)
	Ave/RMS	Ave
Special features Industive pickup Dwell PPM duty cycle	Input impedance	10M
	Special features	Inductive pickup, Dwell, RPM, duty cycle
Dimensions 146(H) x 66(W) x 42(D)mm	Dimensions	146(H) x 66(W) x 42(D)mm





7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1444	\$59.95	\$56.50	\$47.90

IP67 True RMS Autoranging Cat IV DMM

- IP67 waterproof
- True RMS
- Auto power-off
- Backlight
- Data hold & relative function
- Diode test
- Autoranging
- Audible continuity
- 10A current range
- Double moulded case

JAYCAR QUALITY	
ALL METERS INCLUD	E
QUALITY TEST LEADS	
QUALITY TEST ELAS.	



This is an excellent true RMS multimeter that features a large, easily read display and carries an IP67 environmental rating. This means the multimeter is waterproof and will not be damaged if accidentally dropped into water or left out in the rain. The meter has data should and relative measurement capabilities and is housed in a robust, double moulded case. Includes leads, soft carry case and user manual.

Specifications	
Display	4000 count
Security Class	Cat IV 600V
Basic DCV accuracy	0.500%
DC voltage	400mV, 4V, 40V, 400V, 1000V (±0.5%)
AC voltage	400mV, 4V, 40V, 400V, 1000V (±0.8%)
DC current	4mA, 40mA, 400mA, 10A (±1.2%)
AC current	4mA, 40mA, 400mA, 10A (±1.8%)
Resistance	400R, 4k, 40k, 400k, 40M (±0.8%)
Capacitance	4nF, 40nF, 4μF, 40μF, 200uF(±3%)
Frequency	4kHz, 40kHz, 400kHz, 4MHz 10MHz (±1.5%)
Inductance	-
Temperature	-
Ave/RMS	True RMS
Input impedance	10M
Special features	IP67, data-hold, relative measurement, backlight
Dimensions	182(L) x 82(W) x 55(D)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1549	\$79.95	\$74.95	\$63.95

Freecall order hotline: 1800 022 888



Digital Multimeters

DMM with Network **Cable Tester**

- Autoranging
- LAN Cable Tester
- Diode Test
- Multimeter functions
- Audible continuity
- Case included
- LAN tester checks faults & miss wired conductors
- · Manual or automatic testing



ALL METERS INCLUDE QUALITY TEST LEADS



XC-5078

Ihis innovative device is ideal for network installers or technicians & will allow the user to easily check cable integrity or measure AC & DC voltage, current, resistance, & continuity etc. without needing to carry two separate devices. The unit will check for cable continuity, open-circuits, short-circuits, & cross-connects etc. A remote terminator is included and enables the user to check network cables at a wall jack or patch panel. Supplied with loop back cable, LAN terminator, and multimeter leads.
Specifications

	Specifications			
	Display	2000 count		
	Security Class	Cat III 600V		
	Basic DCV accuracy	0.500%		
	DC voltage	200mV, 2V, 20V, 200		
	AC voltage	200mV, 2V, 20V, 200		
	DC current	2mA, 20mA, 200mA		
	AC current	2mA, 20mA, 200mA		
	Resistance	200R, 2k, 20k, 200k	, 20M (±0.8%)	
	Capacitance	-		
	Frequency	-		
	Inductance	-		
	Temperature	-		
	Ave/RMS	Ave		
	Input impedance	10M		
	Special features	Data hold, max hold		
	Dimensions	162(L) x 74.5(W) x 4	4(D)mm	
	0. 4	. 0. 4.	0: 40	
	Qty 1		Qty 10	+
7	78 \$79.9!	\$71.95	\$63.95	



Multifunction Environment
Meter with DMM

- · Sound level meter
- · Light level meter
- · Indoor temperature and humidity measurement
- · Non contact voltage

A multi-function environment meter that combines the functions of a A midu-function environment meter that Combines the functions of a sound level meter, light meter, humidity meter and temperature meter. Typical sound applications include checking acoustics of recording studios, auditoriums and professional hi-fi installations. The light and humidity meters are ideal for video photographers, greenhouse and hydroponic setups, etc. Others who should find this meter essential include interior designers, factory and office managers, record and archive keepers, schools, hospitals, laboratories and, of course,

universities.	
Specifications:	
Display	4000 count
Security class	Cat III 300V
Basic DCV accuracy	1%
DC voltage	400mV, 4V, 40V, 100V, 250V (±1%)
AC voltage	400mV, 4V, 40V, 100V, 250V (±1%)
DC current	400μA, 4mA, 40mA, 400mA, 10A (±1%)
AC current	400μA, 4mA, 40mA, 400mA, 10A (±1.2%)
Resistance	400R, 4k, 40k, 400k, 4M, 40M (±1.5%)
Capacitance	50nF, 500nF, 5μF, 50μF, 100μF (±3%)
Frequency	5Hz, 50Hz, 500Hz, 5kHz, 500kHz, 10MHz (±1.2%)
Temperature	-20°C to 750°C (±1.2%)
Ave/RMS	Ave
Input impedance	10M
Special features	Lux, SPL, Humidity
Dimensions	170(H) x 78(W) x 48(D)mm







7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1594	\$99.00	\$92.95	\$78.95

IP67 True RMS Autoranging Cat IV DMM with Wireless USB

- IP67 waterproof
- True RMS
- Wireless USB interface
- PC logging software
- Auto power-off
- Backlight
- · Non-contact voltage
- Data hold
- Diode test
- Autoranging
- Audible continuity
- 10A current range
- Double moulded case



A quality true RMS multimeter with a wireless USB computer interface, non-contact voltage indicator, relative zero and data hold. Double moulded housing is impact resistant and quite durable, and IP67 waterproof rating makes this DMM capable of even the harshest conditions. Wireless USB interface and included logging software allow for computer based live data logging whilst keeping your computer completely isolated and protected.

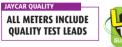
	willist keeping you	computer completely isolated and protected.	
	Specifications		
	Display	4000 count	
	Security Class	Cat IV 600V	
	Basic DCV accuracy	0.500%	
	DC voltage	400mV, 4V, 40V, 400V, 1000V (±0.5%)	
	AC voltage	400mV, 4V, 40V, 400V, 1000V (±0.8%)	
	DC current	4mA, 40mA, 400mA, 10A (±1.2%)	
	AC current	4mA, 40mA, 400mA, 10A (±1.8%)	
	Resistance	400R, 4k, 40k, 400k, 40M (±0.8%)	
	Capacitance	4nF, 40nF, 4μF, 40μF, 100uF(±3%)	
	Frequency	4kHz, 40kHz, 400kHz, 4MHz, 10MHz (±1.5%)	
	Inductance	-	
	Temperature	-20°C to +760°C (±3.0%)	
À	Ave/RMS	True RMS	
1	Input impedance	10M	
	Special features	Wireless USB, IP67, True RMS, non-contact voltage	
	Dimensions	170(L) x 79(W) x 50(H)mm	
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7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1571	\$109.00	\$102.95	\$86.95



IP67 True RMS Cat IV DMM 40,000 Count

- IP67 rated
- · Auto power-off
- Backlight
- Data hold
- Diode test
- Autoranging
- Audible continuity
- Relative measurement
- Double moulded case





40,000 count				
Cat IV 600V				
0.060%				
400mV, 4V, 40V, 400V, 1000V (±0.06%)				
400mV, 4V, 40V, 400V, 1000V (±1.0%)				
400uA, 4mA, 40mA, 400mA, 10A (±1%)				
400uA, 4mA, 40mA, 400mA, 10A (±1.5%)				
400R, 4k, 40k, 400k, 40M (±0.3%)				
4nF, 40nF, 400nF, 4uF, 40uF, 400uF, 4mF, 40mF (±3.5%)				
4kHz, 40kHz, 400kHz, 4MHz, 10MHz (±0.1%)				
-				
-20°C to +760°C (±1%)				
TrueRMS				
10M				
Backlight, data hold, peak hold, min / max hold,				
relative measurement, bargraph, IP67				
182(L) x 82(W) x 55(D)mm				

This rugged meter is designed for professional use and will provide

nns rugged meter is designed for professional use and will provide many years of reliable service. It measures up to 1,000 volts AC & DC and is rated to CAT IV 600. The meter includes temperature and capacitance ranges, as well as peak-hold and min/max options. It is water and dust-proof (IP67) and features a double moulded case that will easily withstand a 2m fall. Includes K-type

Cat.	Qty 1+	Qty 3+	Qty 6+
QM-1543	\$149.00	\$139.95	\$118.95

IP67 True RMS Cat IV DMM with Wireless USB & Storage

- IP 67 waterproof
- True RMS
- Wireless USB PC interface
- PC logging software
- Data log storage
- 9999 measurement storage
- Triple LCD with bargraph
- Backlight
- Auto power-off
- Data hold/Min/Max recording
- Relative measurement
- Diode test
- Autoranging
- · Audible continuity
- 10A current range
- Double moulded case



Specifications					
Display	40,000 count (0.01mV, 0.01uA, 0.01R)				
Security Class	Cat IV 600V				
Basic DCV accuracy	0.060%				
DC voltage	400mV, 4V, 40V, 400V, 1000V (±0.06%)				
AC voltage	400mV, 4V, 40V, 400V, 1000V (±1.0%)				
DC current	400uA, 4mA, 40mA, 400mA, 10A (±1%)				
AC current	400uA, 4mA, 40mA, 400mA, 10A (±1.5%)				
Resistance	400R, 4k, 40k, 400k, 40M (±0.3%)				
Capacitance	4nF, 40nF, 400nF, 4uF, 40uF, 400uF, 4mF, 40mF (±3.5%)				
Frequency	4kHz, 40kHz, 400kHz, 4MHz, 10MHz (±0.1%)				
Inductance	-				
Temperature	-20°C to +1200°C (±1%)				
Ave/RMS	TrueRMS				
Input impedance	10M				
Special features	Wireless USB, datalogging, IP67, bargraph, data hold/storage,				
special realures	triple LCD display				

A serious multimeter for the serious user. Double moulded case for impact resistance

and IP67 waterproof protection. Data storage capability allows this meter to be used as a data logger, which can then be connected to a PC via wireless USB interface keeping the PC completely isolated from whatever is being measured. Triple LCD

Also features data hold with min/max recording, 4-20mA process loop measurements with % reading, a wide capacitance range and many more features. A truly fantastic multimeter designed to last you several years out in the field.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1575	\$199.00	\$186.95	\$158.95

Cat IV Insulation Tester/Multimeter

- · Analogue/digital display
- Data hold
- Max/min
- Moulded case
- Backlit LCD
- Auto power-off

JAYCAR QUALITY	
ALL METERS INCLUS	
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Commonly known as a megger and suitable for high voltage insulation testing up to 4 gigaohms at up to 1000V. It also has AC/DC voltage and low resistance multimeter functions. Moulded storage case and holster included.

182(L) x 82(W) x 55(D)mm

4000 count
Cat IV 600V
0.8%
1000V (±0.8%)
750V (±1.2%)
40R, 400R (±1.5%)
4M, 40M, 400M, 4000M (±2.0%)
125V, 250V, 500V, 1000V @ 1mA nominal
Ave
Dual display, bargraph, backlight,
test hold & lock function
200(L) x 92(W) x 50(D)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1493	\$199.00	\$186.95	\$158.95

Freecall order hotline: 1800 022 888



MULTIMETER ACCESSORIES

Magnetic DMM Strap

Keep your DMM handy and stash a few fasteners while you're working. Ideal for working up ladders or anywhere you need an extra pair of hands and the missus is indisposed

· Suits most multimeters with a screw hanging type holster



Multimeter Carry Case

Hard wearing and good looks make this multimeter case perfect for protecting your valuable multimeter from harm. With foam lining to cushion the meter, it zips up tight guarding it from dirty, dusty conditions. • Dimensions: 190(L) x 125(W) x 45(D)mm

Qty 6+ HB-6361 \$6.95

FLUKE.

Getting The Most From Your Multimeter

Primarily aimed at beginners and those with a limited knowledge of electronics. Chapter 1 covers the basics of analogue & digital multimeters. In chapter 2 various methods of component checking are described, including tests for transistors,

thyristors, resistors, capacitors and diodes. Circuit testing is covered in chapter 3, as well as voltage, current and continuity checks

- Softcover, 102 pages Dimensions: 110(W) x 178(H)mm

	,	,
7	Cat.	Qty 1+
	BB-7034	\$17.95



SF-2279

OM-1515 \$5.95 **Fast Acting Cartridge Fuses**

Qty 1+

FOR USE IN MULTIMETERS

Used in many well-known multimeters including Listed by Underwriters Laboratories and certified by CSA. Fast acting fuse designed for use in circuits with high AC fault current capacity.

600V 15A (SUITS FLUKE) 600V 1A (SUITS FLUKE) Cat. SF-2276 Spare ferrule fuses for our IP67 CAT IV rated DMMs:

1000V 10A Cat. SF-2277 1000V 500MA Cat. SF-2278 1000V 800MA Cat. SF-2279

7	Size (mm)			Cat.	Qty 1+	Qty 3+	Qty 6+
	32 x 6.3	0.5A	1000V	SF-2278	\$9.95	\$8.75	\$7.75
	32 x 6.3	0.8A	1000V	SF-2279	\$9.95	\$8.75	\$7.75
	35 x 10	1A	600V	SF-2276	\$8.95	\$7.95	\$6.95
	38 x 10	15A	600V	SF-2274	\$17.95	\$15.95	\$14.35
	38 x 10	10A	1000V	SF-2277	\$14.95	\$13.35	\$11.70

SF-2274 SF-2277 SF-2276 SF-2278

CLAMPMETERS

Cat IV Fixed Jaw Clampmeter

- · Non-contact voltage sensor
- Data hold
- · Auto power-off
- · Diode test
- · Audible continuity test

The ideal test instrument for electrical contractors. Compact and light with probe storage in the back for easy one-handed operation. Jaw opening is 16mm.

	Specifications	
	Display	2000 count
	Security Class	Cat IV 600V
	Basic DCV accuracy	1.000%
	DC voltage	200V, 1000V (±1.0%)
	AC voltage	200V, 750V (±1.5%)
	DC current	-
	AC current	200A (±3.0%)
	Resistance	200R, 2k, 20k, 200k, 2M, 20M (±1.0%)
	Capacitance	-
	Frequency	-
	Inductance	-
	Temperature	-
á	Ave/RMS	Ave
4	Input impedance	1M
	Special features	Fixed jaws, data hold, non contact voltage
	Dimensions	193(L) x 54(W) x 31(D)mm
	0+	v 1 :

JAYCAR QUALITY **ALL METERS INCLUDE QUALITY TEST LEADS**



OM-1567

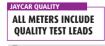
Specifications

AC Clampmeter for DMMs

- AC current up to 300A
- · Moulded hand guard for safety
- · 3m extended curly cord
- 4mm banana plugs
- · High quality ABS construction

This rugged adaptor plugs into your digital multimeter to allow high current AC measurement up to 300amps. This figure is dependent, however, on you multimeter's low AC voltage range, as the adaptor produces 1mV per every 0.1 amps measured, allowing a maximum of 200amps on a 2V DMM range or 300amps on a 4V DMM range. If you have a 2,000 count DMM with a 2V range you could of course, switch to the next range on your DMM (200V) although accuracy would suffer somewhat. The adaptor features a moulded hand guard for increased safety. 3 metre extended curly cord plus shroulded 4mm banana plugs safety, 3 metre extended curly cord plus shrouded 4mm banana plugs and a high quality ABS construction.

(Qty 1+	Qty 3+	Qty 6⊣
Weight	220g		
Dimensions	156(L	L) x 80(W) x 35(D)m	m
Max Jaw Opening	30mr		
Working Voltage	600V		
Output Voltage	1mV	AC per 0.1amp AC	
Current Range	0.1A	to 300A AC RMS (3)	V scale)





QM-1565

\$19.70

\$22.35

CLAMPMETERS (CONTINUED)

400A AC Clampmeter

- Autoranging
- Relative mode
- Diode test
- · Audible continuity
- Data hold
- · Auto power-off
- Jaw opening 30mm
- Temperature probe
- Carrying case

JAYCAR QUALITY **ALL METERS INCLUDE QUALITY TEST LEADS**



	Resistance
	Capacitance
	Frequency
	Inductance
	Temperature
	Ave/RMS
	Input impeda
M	Special featu
	Dimonsions

Our entry-level clampmeter. It has most of the features of the bigger models, such as data hold and auto power-off, but with only AC current measuring capability.

Specifications	
Display	4000 count
Security Class	Cat III 600V
Basic DCV accuracy	0.500%
DC voltage	400mV, 4V, 40V, 400V, 600V (±0.5%)
AC voltage	400mV, 4V, 40V, 400V, 600V (±1.5%)
DC current	-
AC current	40A, 400A (±2.5%)
Resistance	4k, 40k, 400k, 4M, 40M (±3.0%)
Capacitance	4nF, 40nF, 400nF, 4uF, 40uF, 100uF (±2.5%)
Frequency	4kHz, 40kHz, 400kHz, 4MHz, 10MHz (±1.2%)
Inductance	-
Temperature	-20°C to +1000°C (±3%)
Ave/RMS	Ave
Input impedance	10M
Special features	Data hold, non-contact voltage, relative measurement
Dimensions	198(L) x 66(W) x 36(D)mm

Qty 1+ \$59.95 **Qty 6+** \$47.90 Qty 3+ QM-1561

400A AC/DC Clampmeter

- Autoranging
- Relative mode
- Diode test
- Audible continuity
- Data hold
- · Auto power-off
- Jaw opening 30mm
- Temperature probe
- · Carrying case

JAYCAR QUALITY **ALL METERS INCLUDE QUALITY TEST LEADS**



Easy one-hand operation makes this meter perfect for the working installer or tradesman. This is a quality, intermediate-level clampmeter with more than useful current ranges up to 400 amps AC and DC.

Display	4000 count
Security Class	Cat III 600V
Basic DCV accuracy	0.500%
DC voltage	400mV, 4V, 40V, 400V, 600V (±0.5%)
AC voltage	400mV, 4V, 40V, 400V, 600V (±1.5%)
DC current	40A, 400A (±2.0%)
AC current	40A, 400A (±2.5%)
Resistance	4k, 40k, 400k, 4M, 40M (±3.0%)
Capacitance	4nF, 40nF, 400nF, 4uF, 40uF, 100uF (±2.5%)
Frequency	4kHz, 40kHz, 400kHz, 4MHz, 10MHz (±1.2%)
Inductance	-
Temperature	-20°C to +1000°C (±3%)
Ave/RMS	Ave
Input impedance	10M
Special features	Data hold, non-contact voltage, relative measurement
Dimensions	198(L) x 66(W) x 36(D)mm

Qty 3+ Qty 6+ Qty 1+

1000A True RMS AC/DC Clampmeter

- Autoranging
- Relative mode
- Diode test
- · Audible continuity
- Data hold
- · Min/max mode
- Auto power-off
- Jaw opening 40mm
- Temperature probe
- · Carrying case

Ideal for electrical fitters and contractors working with high currents, this meter will read up to 1000A AC or DC. It has every feature you'll ever need in your trade.

Specifications	
Display	6000 count
Security Class	Cat III 600V
Basic DCV accuracy	0.500%
DC voltage	600mV, 6V, 60V, 600V (±0.5%)
AC voltage	600mV, 6V, 60V, 600V (±1.5%)
DC current	600A, 1000A (±2.0%)
AC current	600A, 1000A (±2.5%)
Resistance	6k, 60k, 600k, 6M, 40M (±3.0%)
Capacitance	6nF, 60nF, 600nF, 6uF, 60uF, 100uF (±2.5%)
Frequency	6kHz, 60kHz, 600kHz, 6MHz, 10MHz (±1.2%)
Inductance	-
Temperature	-20°C to +1000°C (±3%)
Ave/RMS	TrueRMS
Input impedance	10M
Special features	Backlight, non-contact voltage, data hold, min-max,
special leatures	relative measurement, bargraph
Dimensions	230(L) x 76(W) x 40(D)mm

ALL METERS INCLUDE QUALITY TEST LEADS

www.iavcar.com.au

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1566	\$139.00	\$124.95	\$110.95





Parrot™ Clip Leads

The Parrot™ Clip is the only test probe that provides both clip-on hands free contact as with an EZ-hook and normal point contact like a test probe. These feature a sprung hook, which is soldered directly to the lead and housed inside a round metal tube. The grip is performed

between the 2 metal parts, which can be used as pincers if required. Probes are supplied with 1m leads terminated to banana plugs and are fully insulated to 1000V.



Qty 6+ WT-5330 \$24.95 \$22.35 \$19.70

Multimeter Probe Alligator Clips

Turn your DMM probes into clips!

- These alligator clips simply push onto the end of the test probes Length approximately 55mm Jaw opening 8mm
- Sold as a pair 1 red 1 black



16 Piece Test Lead Set

Consists of two leads with screw sockets on each end Attachments screw in All colour coded red and black

- 4 x alligator clips
- 4 x 2mm pin tips4 x banana plugs
- 2 x spade lugs

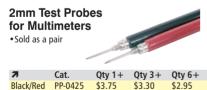


Multimeter Test Probes Shrouded Type

• Banana plugs are right angle with 15mm covered pin.

Alligator clips included





High Quality Banana Piggyback Test Leads

A set of factory-moulded piggy back style banana plugs, each connected by one metre of high-quality, ultra-flexible 500VDC 12A rated cable.

Contains 2 x black, 2 x red and 1 each of blue, yellow and green leads - 7 in all.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	WT-5326	\$24.95	\$22.35	\$19.70

Professional Cat IV Multimeter Probes

Professional multimeter test probes have always been an expensive choice so what we've done is work closely with a manufacturer to get great quality probes at a genuinely affordable price! There is no longer a need to settle for second best with your multimeter probes, especially if you have them in your hand almost every day.

To start with, we've made them extra long; they're 1200mm long so you don't drag your meter across your workbench as you move around a circuit and makes them perfect for bench top meters. They're Cat IV rated for safety, feature finger guards and can handle 20A of current. The best part is the actual probes themselves. To start with, the probes are suitable for inserting into a standard 4mm banana socket using the same spring hold system. Also included are probe covers which not only stop the sharp points being dangerous, they allow only just the tip to be exposed for delicate work where you can be in danger of making a short between two connections which are close together.

Specifications: Extra long 1200mm 600V Cat IV rated 20A current rating

Probes suitable for inserting (and holding) in 4mm banana sockets. Probe safety cover with slot for delicate work. Comfortable and ergonomic grip.

Sold as a pair.





7	Cat.	Qty 1+	Qty 3+	Qty 6+
	WT-5333	\$11.95	\$10.70	\$9.50

Multimeter Test Probes

With 4mm right angle unshrouded banana plugs

Length 930mm Suits QM-1500, etc



Test Leads Banana plugs to clip. There

are many situations where multimeter probes are difficult to use

• Length: 700mm

Qty 1+ Qty 3+ Qty 6+ WT-5320 \$5.95 \$5.25

DMM Leads with Blade Fuse Fitting

Make your auto electrical work much easier. Instead of conventional probes, these DMM leads have fittings for standard or mini blade fuse sockets, leaving your hands free. A must for auto electricians or installers. Length

WT-5340 DMM Lead Banana Plug to Blade Fuse WT-5342 DMM Lead Banana Plug to Mini Blade Fuse



7	Cat.	Qty 1+	Qty 3+	Qty 6+
Blade Fuse	WT-5340	\$11.95	\$10.70	\$9.50
Mini Blade Fuse	WT-5342	\$11.95	\$10.70	\$9.50

Retractable 3m Alligator Test Lead Set

Set of 3 heavy duty leads in red, black, and green terminated with insulated alligator clips in a handy retractable reel. 3m in length, it is ideal for testing and troubleshooting electronic systems by connecting from components in machinery to test equipment or bypassing long wiring to isolate a fault.

- · Rating when wound: 6A
- Rating when unwound: 10A
 Lead Length: 3m
- Reel Dimensions: 152(Dia) x 20(W)mm

SMD DMM Test Leads

Designed for measuring SMD components in-circuit. This lead set has standard 4mm banana plugs to fit any DMM. These tweezer style probes allow easy one-handed operation.

 Gold plated tips · Lead length: 1m



2	7	Cat.	Qty 1+	Qty 3+	Qty 6+
		WT-5302	\$17.95	\$15.95	\$14.35

EZ Hook Test Clips - 40mm

Suitable for ICs, transistors, PC pins, etc. Push syringe action. Hirshmann style.

7	Cat.	Qty 1+	Qty 10+	Qty 50+
Red	HM-3036	\$1.75	\$1.55	\$1.40
Black	HM-3037	\$1.75	\$1.55	\$1.40

IC Test Clips

These have a syringe action and are ideal for working with small components. Length 57mm.

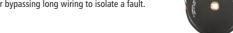


7	Cat.	Qty 1+	Qty 10+	Qty 50+
Red	HM-3040	\$1.95	\$1.75	\$1.55
Black	HM-3041	\$1.95	\$1.75	\$1.55

Large Test Hooks

These test hooks are quality. They are rated at 1000V, and have a banana socket in the handle. They will even accept the new insulated banana plugs. Attached to the handle is an 80mm length of flexible spring, encased in heatshrink material which will allow you to use the hook to attach to parts for testing in really tight places. Total

7	Cat.	Qty 1+	Qty 3+	Qty 6+
Red	HM-3044	\$9.95	\$8.75	\$7.75
Black	HM-3045	\$9.95	\$8.75	\$7.75



length is 190mm.



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	WT-5334	\$24.95	\$22.35	\$19.70

Oscilloscope & Probes

FANTASTIC WEB SITE

In the 60's IBM produced a video which attempted to show the lay person the enormous dynamic range of SCALE of the very very big to the very, very small.

If you saw that video now you would realise that it is very dated.

Good news! There is a new graphic animation on a web site which shows down to an (alleged) "string" (the smallest particle postulated) up to the very large structures in the universe and everything in between in scale.

This is a truly remarkable explanation of the scale of the world in which we are a tiny part. It is indeed so remarkable it may trigger a bright young person to be inspired to take up science as a career.

Please have a look. http://htwins.net/scale2/

Standard Jumper Lead Kit

Ideal for connecting devices for testing.

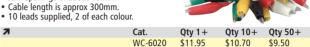
- Alligator clip size is approx 40mm
- Jaw opening is about 8mm Cable length is approx 300mm.
- 10 leads supplied 2 of each colour.



Heavy Duty Jumper Lead Kit

- This kit has large alligator clips and heavy cable.

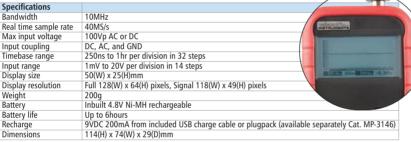
 The alligator clips are approximately 50mm long
- · Jaw openings of about 10mm.



10MHz Velleman Rechargeable Handheld Pocket Scope

A vital piece of test equipment for hobbyists, students, technicians, or designers, the Velleman HPS140 pocket scope is a complete portable oscilloscope with a tiny size. With dozens of features found on full size digital oscilloscopes you'll be amazed how they squeezed all of it into a package a little larger than a Smartphone.

It's impressive list of features include full auto range operation, input sensitivity down to 1mV, real time sample rate up to 40MS/s, and bandwidth up to 10MHz. Aside from the standard scope features it also has some nifty tools including on screen markers for measurement of amplitude and time, RMS power measurement on audio speakers from 2 to 32 Ohms, hold function for the current display, and memory storage for 2 signals which are retained even after shutdown. The unit is housed in a durable rubber surround and the screen is LED backlit for easy viewing. An in-built Ni-MH battery gives up to 6 hours of run time and can be recharged with the included USB charge cable or a 9VDC plugpack (not included use Cat. MP-3146). Supplied with 1:1/1:10 CRO probe and USB charge cable.



1	Cat.	Qty 1+	Qty 2+	Qty 5+	
	OC 1014	\$240.00	¢225 00	¢100 05	



OSCILLOSCOPE PROBES

CRO Probe - 10:1 / 1:1

Passive high impedance oscilloscope probe designed and calibrated for use with instruments having an input impedance of $1M-\Omega$ shunted by 20pF. It may be compensated for use with instruments having an input capacitance of 15 to 35pF. The probe incorporates a three-position slide switch in the head, which selects attenuation of x1, x10 or a ground reference position. This probe suits all of IC tip and adjusting tool.



Specifications	Position x10	Position x1
Attenuation ratio	10:1	1:1
Bandwidth	DC to 60MHz	DC to 6MHz
Rise time	5.8nS	5.8nS
Input resistance	10M Ω when used with oscilloscopes with 1M Ω input	1MΩ (oscilloscope input resistance)
Input capacitance	23pF (approx.)	128pF plus oscilloscope capacitance
Compensation range	15 to 35pF	15 to 35 pF
Marking valtage	600VDC incl. Peak AC	600V DC incl.
Working voltage	derating with frequency	Peak AC derating with frequency.
		Cable: 1.4m
		Safety Meets IEC1010-1 CAT.I

Probe tip grounded via 9M-Ω resistor, oscilloscope input grounded.

7	Cat.	Qty 1+	Qty 2+	Qty 5+
	QC-1902	\$39.95	\$35.90	\$31.90

CRO Probe - 100:1

Low input capacitance high voltage oscilloscope probe designed and calibrated for use with instruments having an input impedance of $1M\Omega$ shunted by 10pF. It may be compensated for use with instruments having an input capacitance of 15 to

- · Suits all of the oscilloscopes in our
- range
 Supplied with sprung hook, channel identifier clip, ground lead, insulating tip, IC tip, measuring tip, BNC adaptor, and adjusting tool



Specifications	
Attenuation ratio	100:1
Rise time	1.4nS
Compensation range	10 to 35pF
Input resistance	100M- Ω when used with oscilloscopes with 1M- Ω input
Working voltage	1200VDC incl. peak AC de-rating with frequency
Cable length	1.2m
Bandwidth	DC to 250MHz
Input capacitance	5.5pF (approx.)
Safety	Meets IEC1010-1 CAT.II

7	Cat.	Qty 1+	Qty 2+	Qty 5+
	QC-1903	\$59.95	\$53.95	\$47.90

Digital Storage Oscilloscopes

DIGITAL STORAGE OSCILLOSCOPES

Consign your CRO to the dustbin of history where it belongs and go digital. Once they were so expensive only professionals could justify buying them, they're now within the reach of anyone in the market for a dual trace scope. The advantages of a DSO gives you capabilities that simply aren't possible with any analogue

- Full 64k colour TFT displayCompact size much smaller than an equivalent analogue CRO
- Fully portable design
- Storage memory
- USB interface
- · Multiple trigger modes
- Digital filters

Your DSO can also serve as a benchtop multimeter or frequency counter. It even has an FFT function for viewing frequency domain data. Quality 10:1 probes, EasyScope software and USB cable are also included.

Two models:

25MHZ DUAL CHANNEL WITH 5.7" SCREEN

Ideal entry-level DSO for the advanced hobby user or technician and is particularly suited to audio work. Full data storage capabilities and USB interface so you can store traces on a flash drive. Memory depth 32k Cat. QC-1932

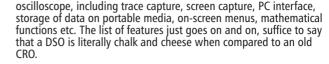
100MHZ DUAL CHANNEL WITH 7" SCREEN

Enhanced performance, professional level test instrument for the technician, design engineer or development laboratory. Full 100MHz bandwidth to keep up with the current digital chip technology, plus a host of features that make it a cost-effective addition or upgrade to your current test equipment. Big 7" wide screen, smaller, lighter more portable and with a host of extra features, and it even includes a tough padded nylon carry bag.

- Digital filter function and waveform recorder function
- Pass/fail function
 Two groups of reference waveforms and 20 groups of capture waveforms
- · Channel waveform and its FFT waveform on split screen
- PictBridge compatibleMemory depth up to 2Mpts
- Armed with waveform record function. Max. 6M record data, Max. 33.3 record hours
 New trigger types, including Edge, Pulse, Video, Slope, Alternative
 Larger measurement range, Max.10V/div

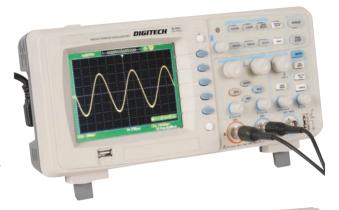
- Lighter, smaller design
 Screen-saver enables less power-consuming, prolong product lifetime
- · Double windows display enlarged waveform and original waveform simultaneously
- Multi-interfaces, enable to use GPIB function with our USB-GPIB

Cat. QC-1934



- Multi parameter auto measure function
- Split screen display
- On-screen menus
- Multiple language interface







Specifications	QC-1932	QC-1934
Channels	2	2
Input impedance	1Mohm	1Mohm
Bandwidth	25MHz	100MHz
Sampling rate	500MSa/S	1GSa/Sec (Per channel)
Input coupling	AC, DC, GND	AC, DC, GND
Max input voltage	400V P-P, Cat II	400V DC+AC P-P, Cat II
Triggers	Edge, pulse, video, slope, alt, delay	Edge, pulse, width, video, slope, alt, delay
Trigger modes	Auto, normal, single	Auto, normal, single
Mathematical operations	Add, subtract, multiply, divide, invert	Add, subtract, multiply, divide, FFT
Display modes		Main, window, window zoom, scan, X-Y
DC Accuracy	±3%	± 3%
Data Record Function	Yes	Yes
Memory Depth	32K	2mpts
Display		
Туре	Colour TFT LCD 145mm	Colour TFT LCD 178mm
Resolution	320 x 234 pixels	480 x 234 pixels
Colour	64k	64k
Contrast	150 to 1	150 to 1
Graticule	8 x 12 div.	8 x 18 div.
Vertical		
Vertical sensitivity	2mV - 10V/div	2mV - 5V/div
Vertical resolution	8 bit	8 bit
Rise time	<14ns	<3.5ns at 100MHz
Mathematical operations	Add, subtract, multiply, divide, FFT	Add, subtract, multiply, divide, FFT
FFT	Hanning, Hamming, Blackman, Rectangular	Window mode: Hanning, Hamming, Blackman, Rectangular Sampling points: 1024
Horizontal		
Range	25ns - 50s/div	2.5ns - 50s/div
Accuracy	±50ppm over 1ms	±50ppm over 1ms
Other		
Dimensions	310(W) x 150(H) x 130(D)mm	340(W) x 150(H) x 110(D)mm
Weight	2.4kg	2.4kg
Accessories	2 x 10:1 probes, EasyScope software, USB cable	2 x 10:1 probes, EasyScope 3.0 software, USB cable

7	Cat.	Qty 1+	Qty 2+	Qty 5+
25MHz	QC-1932	\$599.00	\$539.00	\$479.00
100MHz	QC-1934	\$1,149.00	\$1,034.00	\$919.00

Both models include quality

probes, EasyScope software & a USB cable. The QC-1934 even comes with a carry bag.

How to Test Almost Everything Electronic

JAYCAR QUALITY

Electronics is a unique science - everything that's going on has to be deduced from visible symptoms and effects with very little that is actually physically observable. We depend on test equipment to tell us what's really going on, and using test equipment is an

essential skill in electronics. The book covers everything from setting up a test and work area to using the most important types of test equipment multimeters, oscilloscopes, signal generators, signal tracers, capacitance meters and frequency counters. It also covers testing and

measurement methods, fault finding without circuit diagrams, component testing and some highly specialised measurement in applications such as audio and TV.A comprehensive volume that should be on every technical bookshelf.

• Softcover 326 pages. 190 x 130mm

Cat.	Qty 1	+
BM-7200	\$42.9	5

Function Generator & Dataloggers

FREQUENCY COUNTER

2.7GHz Digital **Frequency Counter**

Ideal for measuring functions of frequency, period totals and self-check. The counter readout is a large 10mm high intensity 7segment LED display with gate time, range and unit of frequency indicators. Decimals are also included. Additional features include data hold, 1 step input attenuation to a factor of 20 and low pass filter. This instrument may be used for adjustment, repair and calibration of AM/FM radios, amateur/CB radios, computer clocks, audio/video equipment etc. This frequency counter is neatly presented in an robust high impact ABS case with sturdy rubber

Specifications		
Frequency range	10Hz - 2700MHz	
Display	8 digit LED	
Gate time	0.01s /0.1s/1s	
Accuracy	± 1Hz	100
	± Count figure	
	± Time base	-
Input Characteristics Channel 1		
Input sensitivity	20mV @ 10Hz - 10 MHz	
	25mV @ 10MHz - 100MHz	
Input impedance	1M ohm	524
Max input voltage	250VRMS	:: 画 1
Input Characteristics Channel 2		100.00
Input sensitivity	25mV @ 100MHz - 2700MHz	
Input impedance	50 ohm	
Max input voltage	5VRMS	
Power input	2240VAC 50Hz	
Power consumption	5W	
Dimensions	230(W) x 210 (H) x 76(D)mm	
Weight	1.8kg	



7	Cat.	Qty 1+	Qty 2+	Qty 5+
	QT-2202	\$169.00	\$151.95	\$134.95

FUNCTION GENERATOR

Velleman Handheld **1MHz Function Generator**

Finally, a signal generator with the features of a bench top generator and a portable size! The Velleman HPG1 pocket signal generator will produce accurate test signals at frequencies from 1Hz all the way to 1MHz yet it is only a little bigger than a smartphone

Easy to use, the pushbutton controls allow you to quickly set up generation of sine, square, and triangle waveforms with adjustable frequency and amplitude. The backlit LCD screen shows the current waveform and frequency settings. Frequency changes are in variable steps from 1Hz to 10kHz Frequency changes are in variable steps from 1Hz to 10kHz allowing you to change settings at your preferred speed. For more advanced testing it also has a frequency sweep mode to shift between two frequencies using a linear or logarithmic scale over an adjustable period. Signal amplitude is indicated by a handy slider bar with the output level also displayed in dBm and Vrms or Vpp (depending on the profession of the profes waveform). An inbuilt Ni-MH battery gives up to 6 hours of run time and can be recharged with the included USB charge cable or a 9VDC plug pack (not included use Cat. MP-3146). Supplied with USB charge cable, BNC to RCA adaptor, and BNC to binding post adaptor.

Specifications	
Digital to analogue converter resolution	10 bits
Frequency range	1Hz to 1MHz
Frequency steps	1Hz, 10Hz, 100Hz, 1kHz, 10kHz
Waveforms	Sine, square and triangle
Maximum output voltage	8Vpp
Sweep modes	Linear or logarithmic, single or bidirectional
Sweep period	0.01Hz to 100Hz
Dimensions	114(H) x 74(W) x 29(D)mm
Display size	50(W) x 25(H)mm
Display resolution	128(W) x 64(H) pixels
Weight	200g
Battery	Inbuilt 4.8V Ni-MH rechargeable
Battery life	Up to 6hours
Recharge	9VDC 200mA from included USB charge cable or plug pack (sold separately use Cat. MP-3146



Cat.	Qty 1+	Qty 2+	Qty 5+
QT-2304	\$199.00	\$178.95	\$158.95

DATALOGGERS

USB Temperature/Humidity Dataloggers

A must for anyone involved with food preparation, archiving or storage or applications where starge of environment information is important. These USB dataloggers log temperature and humidity readings and store them in internal memory for later download to a PC. The measurement interval is adjustable - you simply set up the recording

parameters then download the data when you need it. The data is recorded at the prescribed intervals and will alert you if preset min/max levels are exceeded. Countless applications including greenhouses, museums, warehouses, container storage, photography, archives, food preparation etc.

Two models available with mounting bracket and software included:

DIRECT PLUG IN TYPE

- Easy USB interface
- Mounting bracket included
- 32000 sample memory (16000 temperature, 16000 humidity)
- Software compatible with Windows 2000, XP, Vista

USB / LCD READOUT TYPE

- 32,700 sample memory
- Adjustable measurement cycle
- Analysis software included
- Software compatible with Windows 2000, XP, Vista

Specification	
Range	-40 - 70°C (-40 - 158°F), 0 - 100% relative humidity
Accuracy	Humidity ±3%
	Temperature ±1°C
Resolution	Humidity 0.1%,
	Temperature 0.1°
Memory	3200 samples
Battery life	5 sec rate: 12 months, 10 sec rate: 2.5 years
Dimensions	100(L) x 22(W) x 20(H)mm

Specifications	
Dange	–40 - 70°C (-40 - 158°F),
Range	0 - 100% relative humidity
Accuracy	Humidity ±3%
	Temperature ±1%
Resolution	Humidity 0.1%
	Temperature 0.1°C
Memory	32,000 samples
Measurement cycle	1s - 24h
Dimensions	95(H) x 50(W) x 32(D)mm

7		Cat.	Qty 1+	Qty 3+	Qty 6+
	Datalogger	QP-6013	\$119.00	\$106.95	\$94.95
	With LCD	QP-6014	\$179.00	\$160.95	\$142.95

Freecall order hotline: 1800 022 888





Thermometers - Mini Digital

THERMOMETERS

Digital Thermometer for Fridge or Freezer

- · Temperature range: -50°C to 70°C
- · Reading °C or °F
- Low temperature alarm

Specifications	
Room temp range	-10 to 50°C
Fridge/freezer temp range	-50 to 70°C
Display size	26(W) x 13(H)mm
Fridge sensor cord	1m
Requires	1 x AAA battery (supplied) 67(W) x 39(H) x 15(D)mm
Dimensions	67(W) x 39(H) x 15(D)mm

Keep your fridge at the right temperature all year round. Simply attach the sensor to the desired position in the fridge or freezer and the thermometer on the outside with the attached magnets or enclosed Velcro strip. Set your preferred reading of °C or °F and then set the minimum and maximum temperatures with the alarm. If the fridge goes below or above these set temperatures the alarm will sound until you manually turn it off to

investigate the problem. No more spoiled food ever again. Shows room temperature at the touch of a button as well.



Qty 3+

PROBE THERMOMETERS

Digital Stem Thermometer

 Requires LR44 battery (included) / 500 life

	5000 hour battery
	life
•	205mm long

Specifications	
Measurement range	-50 - 200°C / -58 - 392°F
Accuracy	±1°C, ±2°F
Display resolution	0.1°
Sampling rate	Every 0.7 seconds

Endless applications such as food

processing, laboratory work, photography, home brewing etc. this digital thermometer features fast response, min/max memory, data hold and automatic shut-off after 10 minutes. The probe is stainless steel, so it will never corrode, the body is

splashproof and it will never need calibration.

Qty 3+ \$20.35



MINI NON-CONTACT THERMOMETERS

Mini Non-Contact IR IP67 Thermometer

· Batteries and lanyard included

Specifications		
Range	-33 to +110°C (-27 to +230°F)	
Accuracy	2.5°C	
Distance to spot ratio	1:1	
Response time	1 second	
Size	82(I) x 17(Dia)mm	

Ultra compact, non-contact thermometer. IP67 rated so is ideal for industrial and lab applications. LCD readout gives temperature in Celsius or Fahrenheit



Qty 3+ OM-7218 \$29.95 \$26.90



Digital Thermometer with K-Type Thermocouple

Display

Temperature

Sampling rate Special features

- ICD
- Pocket Size
- Wide Temperature Range
- Thermocouples &

Battery included				
7	Cat.	Qty 1+	Qty 3+	Qty 6+
	OM-1602	\$30.05	\$37.45	\$31.00

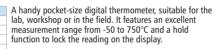
2000 count

2.5Hz

Data hold

-50°C to +750°C (±1%)

118(L) x 70(W) x 29(D)mm







Pocket Sized Non-Contact Digital Thermometer

- LCD
- Pocket Sized
- · Fast Response Time
- · Battery Included

Specifications	
Display	8888 count
Optical resolution	1:1
Temperature	-35° C to $+230^{\circ}$ C / -31° F to $+446^{\circ}$ F ($\pm 2\%$)
Emissivity	0.95
Sampling rate	1Hz
Special features	Pocket sized
Battery	1 x CR2032
Dimensions	74(L) x 40(W) x 20(D)mm

Now you can take temperature readings with a device that fits in your pocket! Featuring an easy to read LCD, this handy little unit can go with you anywhere. Monitor performance of appliances such as refrigerators, dishwashers, freezers or ovens. Handy for use in the kitchen or the food service industry to ensure proper cooking, grilling and storage temperatures.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-7225	\$34.95	\$32.90	\$27.90





Thermometers – Digital

NON-CONTACT THERMOMETERS (CONTINUED)

Economy Non-Contact Thermometer

• Built-in laser pointer

 Wide temperature range

• 8:1 Distance to spot ratio

· Auto data hold Carry case included

Specifications Display
Optical resolution -30°C to +260°C (-22° to +500° F) . Temperature Fixed to 0.95 Sampling rate Built-in laser pointer, automatic data hold, backlight, Special features min / max record, over range indicator Battery 131(H) x 96(W) x 35(D)mm Dimensions

Qty 3+ \$44.90

Safely measure temperature in hard to reach places, hot or hazardous areas the surface. Compact and easy to use, the thermometer can provide several readings within seconds. Backlighting illuminates the LCD display for taking measurements at night or in low light areas. Carry case included.

using the built-in laser pointer to target





 Laser pointing targeting

 Wide temperature range

• 12:1 Distance to spot ratio

Backlit LCD

· Holster Included

Specifications	
Display	3.5 digit
Optical resolution	12:1
Temperature	-50°C to +650°C / -58°F to +1202°F (±1%)
Emissivity	Adjustable 0.10 to 1.0
Sampling rate	6.7Hz
Special features	Dual laser targeting, dual display, automatic data hold,
special leatures	backlight, trigger lock, max hold, high/low alarm
Battery	1 x 9V
Dimensions	146(L) x 104(W) x 43(D)mm

safe distance with this compact sized non-contact thermometer. With a wide temperature range and laser targeting, this portable instrument is easy to use for quick and accurate temperature checking of any surface. With a 12:1 distance to spot size, you can get the temperature of almost the exact spot in most cases. With the backlight, the temperature can be read in low light conditions

Measure the temperature of any surface from a

· Holster included



Qty 1+ Qty3+ QM-7221 \$99.00 \$88.95

Professional High Temperature Non-Contact Thermometer

Backlit LCD

Professional grade

Wide temperature

30:1 distance to spot ratio

Auto data hold

· Moulded carry case

Specifications	
Display	4.5 digit
Optical resolution	30:1
Temperature	-50°C to +650°C / -58°F to +1832°F (±1.5%)
Emissivity	Adjustable 0.10 to 1.0
Sampling rate	1Hz
	Laser targeting, automatic data hold, dual
Special features	display, backlight, trigger lock, min / max / dif /
	avg record, high / low alarm.
Battery	1 x 9V
Dimensions	230(L) x 120(W) x 56(D)mm

Cat. Otv 6+ Qty 3+ OM-7226 \$189.00 \$169.95 \$150.95

This professional infrared thermometer allows you to measure high temperatures with safety. With a range of -50 to 1000° Celsius, it's suitable for lab, furnace, forge and small-scale foundry work. The laser pointer allows for accurate placement of the measurement point and the 30:1 distance-to-target ratio allows for accurate measurement from greater distances. The unit can be mounted on a tripod with trigger lock for unattended min/max logging.

Supplied in a robust blow-moulded case



Fast response and laboratory accuracy, works with K-type thermocouples and offers 0.1 or 1° user-selectable resolution over the entire measurement range. You can monitor two separate temperatures or use the differential function to compare them.



Thermocouple Thermometer - 2 Input

Auto power off

Backlit LCD

Max and hold function

Fahrenheit

· Holster included

 Thermocouples included

Specifications	
Display	2000 count
Temperature	-50°C to 1300°C (-58°F to 2000°F)
Special features	Backlight, data hold, max hold
Battery	1 x 9V
Dimensions	172(L) x 84(W) x 42(D)mm

Qty 1+ Qty3+ Qty 6+ QM-1601 \$79.95 \$74.95 \$63.95

Probe K Type Thermocouple



This plug in thermocouple probe allows you to measure external temperature readings on DMMs. It will measure from below minus 50°C to above 250°C depending on the DMM it is used with. Suitable for gas and liquid, both with good accuracy of 0.75%.

Cat. Qty 3+ Qty 6+

Wire Type K Thermocouple with Twin Banana Plugs



Similar to our other thermocouples, this one is fitted with banana plug terminations but does not have a 'probe' assembly. The thermocouple junction will measure over a wide range of temperature but this will depend on the DMM used

 Typical thermocouple measurement range from as low as -50°C to over 1200°C

Qty 1+ Qty 3+ \$11.95 \$10.70 7 Cat. QM-1284 \$9.50

Wire Type K Thermocouple



This is essentially the same as the probe type shown on this page, except that the sensor is mounted on the end of the cable - no probe. Suits digital multimeters. Measures from below minus 40°C to over 1200°C, actual range depends on the DMM its used with.

Cat Qty 1+ Qty 3+ QM-1283 \$11.95 \$10.70 \$9.50











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Meters - Sound Level & Light

SOUND LEVEL METERS

Micro Sound Level Meter

- Very compact size
- Min / max hold
- Backlit

JAYCAR QUALITY
DIGITAL FOR AN
ANALOGUE PRICE!

Specifications	
Display	3 digit
Range	35 - 100dB (±3.0dB)
Frequency range	31.5Hz to 8kHz
Weighting	A weighted
Special features	Pocket sized, min / max hold, backlight
Battery	1 x 9V (included)
Dimensions	128(L) x 51(W) x 32(D)mm

Compact Digital Sound Level Meter

- Compact size
- Data hold
- Backlit
- Carry case

Specifications	
Display	3.5 digit
Range	30-130dB (±1.4dB)
Frequency range	31.5Hz to 8kHz
Weighting	A / C selectable weighting
Response	Fast / slow selectable
Special features	Max hold, data hold, backlight
Battery	1 x 9V
Dimensions	210(L) x 55(W) x 32(D)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	OM-1589	\$99.00	\$88.95	\$78.95

With a range of 40 - 130dB, this little meter is ideal for environmental, safety and sound system testing. It has a fast response time for transient measurements and is Aweighted for the frequency range of human hearing. Extremely small and price matches its size.



Featuring a wide dynamic range from 30 to 130dB, it can measure both A and C weightings to get the right response for the human ear and can have fast or slow responses to get an "ambient" reading or a short noise. Includes data hold and min/max functions, as well as tripod mount for prolonged use. Great for car audio installers, clubs and PA. Supplied with carry case and wind sock.



Pro Sound Level Meter with Calibrator

· Compliant with Type 2 (Class 2) Standards

- A & C weighting scales
- Fast and slow response
- Tripod mounting thread
- External calibrator (included)
- Maximum hold feature
- Min/Max measurement
- · AC & DC Analogue outputs
- Tripod Included
- Backlit LCD





3.5 digit
±1.4dB
94, 114dB
50dB
0.1dB
Every 0.5 seconds
31.5Hz - 8kHz
278(L) x 76(W) x 50(D)mm

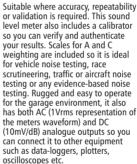
A handy digital lightmeter for photography, lab work,

architectural, engineering and construction applications. It includes an integrated stand and will measure incident light in

4 ranges: 0.01 to 200, 200 to 2,000, 2,000 to 20,000 and

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1592	\$399.00	\$359.00	\$319.00

20.000 to 50.000 lux



Conforms to IEC 61672-1 Class 2 for sound level meters.





LIGHTMETER

Digital Lightmeter

- LCD
- 3.5 Digit
- 4 Ranges
- 0.01 to 50,000 Lux
- Carry Case
- · Separate Photo Detector

The photo detector is wired on a curly cord which extends to 1 metre, allowing the user to take light measurements at the optimum position. Sensor cover included

Specifications	
Display	2000 count
Range	200, 2000, 20000, 50000 lux/Fc
Accuracy	±5%±10d (<10,000lux)
_	±10%±10d (>10,000lux)
Resolution	0.1lux/Fc
Sampling rate	1.5Hz
Special features	Data hold, max hold
Battery	1 x A23 (12V)
Dimensions	188(L) x 64(W) x 24.5(D)mm
Photo detector	115(L) x 60(W) x 27(D)mm

to take light measurements at the optimum position. Sensor cover included.		Julilulli 🗀	hoto detector	188(L) x 64(W) x 115(L) x 60(W) x	
	7	Cat.	Qty 1+	Qty 3-	
		QM-158	37 \$49.95	\$44.90	



Qty 6+

COMPONENT TESTERS

Logic Tester

Quality logic probe. Will test all logic families (TTL, LS, CMOS, etc). Pulse/normal switch to indicate pulse or continuous signals. Three LEDs provide the logic level indication. Will detect pulse widths as narrow as 25nS and for frequencies to 20MHz.

Specifications	
Working voltage	DC 4 - 16V
Operating temperature	-20 +70°C
Frequency response	Max 20MHz
Input impedance	Min 1M Ω
Input overload protection	±250V DC/AC
Supply voltage protection	±50V DC/AC
Current consumption	Max 32mA @ 5V
Response pulse width	Longer than 25nS

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	OT-2210	\$29.95	\$26.90	\$23.70

Semiconductor Component Analyser

The component tester is an intelligent semiconductor analyser that offers simple identification and testing of a variety of 2 or 3-pin semiconductor devices. In addition to providing type and lead identification, it also displays forward voltage, test current and other parameters for transistors.



- Automatic pin-out identification
- Gain & leakage current measurement for BJTs
 Silicon and germanium detection for BJTs
- Forward voltage and test current
 Dimensions: 100(W) x 71(H) x 27(D)mm

₹ Cat.	Qty 1+	Qty 2+	Qty 5+
QT-2216	\$59.00	\$52.95	\$46.95





VOLTAGE DETECTORS

Non-Contact AC Voltage Tester with Torch

About the size of a marking pen, this non-contact tester detects AC voltages from 200 - 1000V. It can be used for detecting live mains in outlets, powerboards or insulated wiring. It also has an LED torch and a handy pocket clip. A must for every toolbox.



MEASUREMENT

ш





7	Cat.	Qty 1+
	QP-2271	\$14.95

Non-contact AC Voltage Proximity Detector

About the size of a marking pen, this non-contact tester detects AC voltages from 200 - 1000V. Featuring red and green indicators, the unit will glow green when safe, and when voltage is detected it will flash red and beep at an increasing rate as you get closer to the voltage source. It can be used for detecting live mains in outlets, power boards or insulated wiring. It also has an LED torch and a handy pocket clip. A must for every toolbox

- Green and Red LED indicators
- Switch able audible and silent mode
 • Auto Power Off
- · Flashlight function
- CAT III rated Dimensions 176(L)



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	OP-2268	\$19.95	\$17.70	\$15.70

3 in 1 Stud Detector with Laser Level

Stud detectors have been around for a long time but sometimes one appears which becomes a definite buy for any serious handyman. This model is one of those! Featuring a stud detector which just doesn't "beep" when you're over the stud, it shows the proximity when you are NEAR a stud via the large LCD and shows a target graphic when you're spot on. Also featuring live wire (voltage) detection, you can be sure the nail you're about to hammer into the wall won't end up in your mains wiring.

The best feature of all is the built in laser level. Rotating across 180 degrees with stops on 45 and 90 degrees, you can instantly and easily do layouts and basic tasks such as picture levelling in a snap. The inbuilt spirit level ensures you're at the right angle.

- Laser levelling, layout and stud locating on vertical
- and horizontal surfaces Wood, metal and live wire detection
- 180 degree pivoting laser plane with level and plumb vials
- 20' laser line projections onto work surface with 90 degree squaring Two self contained half pins to mount unit to work
- surface (vertical or horizontal)
- LCD sensing and mode display with target graphics
- LED display with continuous live wire detection
 Thumb dial adjustable feet for levelling the laser
- Easy keypad operations and comfortable grip
 Powered by 9V battery (included)
- Dimensions: 180(H) x 67(W) x 38(D)mm



Non-Contact Voltage Tester/IR Thermometer

Combining two instruments: a non-contact AC voltage detector and IR thermometer. It provides easy and safe testing of mains voltages and heating systems. Essential tool for tradesmen.



Specifications	
Security class	Cat III 1000V
IR temperature range	-30° to 230°C (-20° to 445°F)
Basic accuracy	± 2%
Resolution	0.1°C (0.1° F)
Response time	<1 sec
AC voltage	100 - 1000V
Dimensions	155(L) x 24(Dia.)mm

- Detects AC voltage up to 1000V with LED indicator
- Precise non-contact
- temperature measurement Automatic range selection Resolution 0.1°C (0.1°F) Celsius or Fahrenheit
- Automatic power-off

7	Cat.	Qty 1+
	QP-2269	\$39.95

Electrical Tester with Polarity Checking & Light

Electrical testers have always been a common item in a sparkie's toolbox and this model is certainly worthy of a place in any handyman's toolbox! The first thing you will notice with this tester is the rugged housing which is designed for maximum safety. Using double moulding, the probes feel good to grip and are IP64 rated. Testing voltage is simple with the two probes being contacted and the unit's LED display will indicate to the nearest voltage up to 690V and polarity will be indicated so if it's DC, you know which one is positive. Not only that, but this unit will also check for low impedance, continuity, do a check for low impedance, continuity, do a single pole phase test and show rotary field indication. A handy LED light is included for dimly lit locations like a roof cavity. Powered by 2 x AAA batteries (included). Voltage test

· IP64 rated housing and Cat III 1000V/ Cat IV 600V rated for safety

works without batteries



Specifications	
Voltage range (AC/DC)	12, 24, 36, 50, 120, 230, 400, 690V
ACV frequency range	0 – 60Hz
Internal impedance	<200kohms
Dimensions	240(H) x 78(W) x 40(D)mm

DIGITECH

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QP-2286	\$49.95	\$44.90	\$39.90

IEII

Testers - Automotive

OTHER TEST EQUIPMENT

Coax Cable Tester

Installers can expect to be working with coax cables and F-connectors a lot more in the future. Simplify your cable and connector testing with this handy tool. Simply connect it to the F-connector and it will give you and audible signal and a red/green go/no go signal to tell you if there's a short or an open circuit in your cable or connectors. The F-connector is removable, so you can fit an adaptor for different types of connectors.



- Requires 1 x AAA battery
- Dimensions: 100mm long



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QP-2289	\$24.95	\$22.35	\$19.70

Power Point & Leakage Tester

Test your power points using this versatile tester. It checks most types of power points within 110V to 240V range for correct wiring and trip levels for earth leakage circuit

The combination of lights on the front panel identifies the following problems:

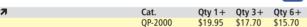
- · No earth connected
- · No neutral connected
- No active connected

RELATED PRODUCT

- Active and neutral reversed
 Active and earth reversed

To determine ELCB trip levels simply slide the switch from 10mA up toward 100mA. All ELCBs should trip before 100mA. Switch positions are 10mA, 15mA, 30mA and 100mA

For more Mains Power **Meters & Monitors** see page 350



Moisture Level Meter

Featuring a simple to use and easy to read display, a bar graph extends up the screen indicating the amount of moisture. Can be used on timber, cardboard, paper, and even on hardened materials such as concrete and mortar. Features an integrated calibration checker in the lid. Specifications Measuring principle Electrode length Electrical resistance Integrated, replaceable Electrodes Wood: 6-44% Measurement range Other materials: 0.2-2.0% Housing Impact-proof plastic 2 x CR2032 Battery 140(H) x 48(W) x 33(D)mm Dimensions Qty 1+ Qty 3+ Qty 6+ \$55.95

QP-2292

Hand Held pH Meter

A simple and accurate device for checking pH levels in water. The unit is equally valuable for keeping your fish tank at the proper pH level for optimum fish health or checking your swimming pool for the right balance. The meter is simple to use and the large liquid crystal display gives clear and precise readings that are much more accurate than messy chemicals. The unit has an extendable probe that can be adjusted to suit each application. The meter is supplied with a 9 volt battery, a

Specifications		_
Range	1 - 14 pH	
Resolution	0.1 pH	
Accuracy	±0.2 pH	
Operating temperature	0° - 50°C	1007
Weight	120g	
Dimensions	40(W) x 158(H) x 34(D)mm	1
_	Cat	Oh. 1 :

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1670	\$59.95	\$53.95	\$47.90
Buffer Solution (50ml)	QM-1671	\$8.95	\$7.95	\$6.95

COUNTER

Handheld/Desk Mounted Tally Counter

This tally counter is ideal for checking attendance numbers at large events, counting inventory or making sure tour participant numbers are correct. Made from chrome plated aluminium, it is easily removed from its base to comfortably fit into the palm of your hand. The base can also be mounted on a desk or other surface for convenience. A gentle push of the thumb counts from 0-9999. To reset the JAYCAR QUALITY

counter, just wind the knob back to 0000.

REMOVABLE BASE • 60(H) x 57(D) x 57(W)mm

FOR HANDHELD USE



Qty 3+

\$11.35

\$10.35

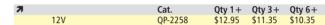
\$12.95

Cat. TC-2500

AUTOMOTIVE TESTERS Battery, Charger & Alternator Testers

These handy devices quickly indicate the condition of your car or truck battery, charger or alternator. They use 3 LEDs to indicate battery and charge under engine on/engine off conditions. Compact and lightweight, they include 600mm leads with crocodile clips, and an inbuilt magnet to secure the unit while taking measurements

• Dimensions: 120(L) x 33(W) x 20(D)mm



3 - 28V Pro Grade Automotive Tester

This professional grade cordless voltage tester is designed for used on modern cars. The voltage tester detects from 3 to 28 volts. It will light up and buzz when positive voltage is detected. Made from rugged chrome metal construction it is safe to use with ECMs, air bags, sensors, transducers etc.

The circuit tester does not require a ground wire or clip, so it is easy to check in hard to reach places. A probe is supplied with a V-Groove tip to make piercing wire insulation safe.



Cat. Qty 3+ QP-2212 \$14.95 \$13.35

3 in 1 Digital Tyre Pressure Gauge

This pocket sized digital tyre gauge measures tyre pressure in four units, and also your tyre tread depth to take the guessing game out of when it's time to change your tyres. Features a large backlit LCD display for reading at night and also features a blue LED light in case you get caught out at night. A must have for any motoring enthusiast.

Units of measure: PSI, Bar, Kgf/cm , kPa

Specifications - Tyre gauge			
Range	0-100PSI, 0-7.0Bar,0-7Kgf/cm ,0-700kPa		
Resolution	0.1PSI, 0.01Bar, 0.01Bar,).01Kgf/cm ,1kPa		
Accuracy	+/-1%		
Specifications - Tread depth			
Range	0-22mm		
Resolution	0.01mm		
Battery	one CR2032 battery included		
Dimensions	100(L) x 50(W)mm		

Cat. OP-2297 \$14.95 \$11.70

QP-2293

Digital Tyre Pressure Gauge

Incorrect tyre pressure can have a detrimental effect on vehicle handling and cause uneven or premature tyre wear, which results in early (and expensive) tyre replacement. This simple device makes it easy to keep track of tyre pressure and avoid pressure related problems. The reading is displayed on the unit's built-in LCD screen. Includes an integrated torch for night measurements.

· Displays in bar, PSI, or kPa

• Includes 2 x AA	A batteries	WARRANTY
Specifications		
Range	5 - 100PSI	
Resolution	0.1PSI	
Accuracy	+/- 0.5PSI	
Operating temp	-10° - 40°C	
Dimensions	156(L) x 42(W) x 20(H)mm	
7	Cat.	Otv 1+





\$19.95

Automotive Multi-Function Circuit Tester with LCD

Designed to test the electrical system of an automotive vehicle running on 12V or 24V. One of the great features is being able to activate components with positive or negative without using a jumper wire. This would, for example, allow you to send voltage to a relay that controls whether or not a fan switches on. You can quickly test the voltage and polarity of a circuit or whether it's short or open, check continuity, locate cylinders which are misfiring, measure frequency of ignition pulses, test solenoids, lights and more. To top it all off the easy to read LCD is backlit so it's perfect for the dark crevices of an engine bay. All the features of a brand name

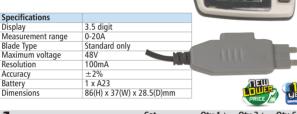


7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1494	\$49.95	\$44.90	\$39.90

Automotive Blade Fuse Current Meter

This handy test unit make it so easy to measure currents on individual circuits. Simply plugs into a blade type fuseholder and displays the current draw on an easy-to-read LCD display.

Makes it easy to find that circuit which is draining your car battery!



7			Cat.	Qty 1+	Qty 3+	Qty 6+
	0 - 20A	48V	QP-2251	\$19.95	\$17.70	\$15.70

Cigarette Lighter Battery Monitor

Check the voltage output of your car's battery quickly and easily. Simply plug this handy voltmeter into the cigarette lighter socket and get an instant readout of the electrical system's voltage.

- Display resolution: 0.1V
- Accuracy: +/- 2% Operating voltage: 8 30VDC





12VDC Voltage Polarity Easy Tester

A passive, quick and easy testing solution that performs five essential tests in the field:

- 1. Voltage: Check voltage of power sources easily in the field without a multimeter
- 2. Load: Apply a simulated 1A or 500mA load to power sources to check the voltage under load 3. Polarity: Check polarity of connections using the
- illuminated power connector Voltage drop: Check the voltage drop over
- long cable runs
 5. PTC: Check the integrity of PTC fuses

The load applied is selectable between 1A or 500mA to test wiring depending on location, device to be tested, and anticipated voltage drop. The illuminated power connector clearly displays polarity. Ideal for CCTV and security installers, car audio, roadies, AV techs etc.

• Dimensions: 51(L) x 44(W) x 29(D)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	OP-2215	\$24.95	\$22.35	\$19.70

Brake Fluid Tester

Digital brake fluid tester suitable for determining brake fluid quality. Quality is tested and indicated on five LEDs showing percentage of water in the brake fluid.



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QP-2291	\$29.95	\$26.90	\$23.70

Digital Tachometer

This easy-to-use hand-held digital tachometer measures up to 99,999 RPM and features a large LCD, laser pointer, low battery indicator, and memory recall for the last displayed value, minimum value, and maximum value.

It also features a DC socket for mains power (5VDC at 50mA). It can also be switched to measure either actual RPM or total revolutions.

Supplied with carry case and 600mm reflective tape marks, which can be cut to size.

- 5 Diait
- 99,999 RPM



Specifications	
Display	2000 count
Test range	2.5 to 99,999 RPM
Basic DC accuracy	0.5%
Sampling	0.5 sec (over 120RPM)
Range select	Autoranging
Detection distance	50 to 500mm
Power consumption	50mA approx.
Batteries	4 x AA batteries (included)
Dimensions	160(H) x 72(W) x 37(D)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1448	\$79.95	\$71.95	\$63.95

EASY DISTANCE MEASURING

Ultrasonic Distance Meter with Laser

Measure distance quickly from a remote position. This ultrasonic measurer also calculates area, sums total readings and stores data for later use in imperial or metric units. Laser pointer for accurate placement of the measurement point.

- Backlit LCD
- Auto or manual power-off
 Case and bolt slip includes

•	case and bei	t-clip iii	iciuueu		
•	Dimensions:	175(L)	x 62(W) x 45(D)mm

Specifications	
Range	0.6 - 16m (1.6 - 52ft)
Accuracy	±1% of reading
Response time	2 seconds
Auto power-off	100 seconds
Backlight time-out	7 seconds

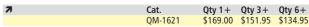
7				WARRANTY	
	Cat.	Qty 1+	Qty 3+	Qty 6+	
	OP-2295	\$29.95	\$26.90	\$23.70	

Professional Laser Distance Meter

Not just an accurate distance meter, this comprehensive measurement tool also adds subtracts and calculates area, volume and takes indirect measurements. The memory stores up to 20 historical records and these can be used for area and volume calculations. Thanks to some dude called Pythagoras, the indirect measurement function means you can, for example, measure the length or height of wall from a distance away if you are unable to get access to it.

- Area and volume calculations
- · Add/subtract measurements Continuous measurement
- Min/max distance tracking

Specifications	
LCD	Backlit
Accuracy	Laser
Batteries and case included	
Range	0.05 - 50m / Accuracy: 1.5mm
Units	metres, feet, inches
Dimensions	110(L) x 47(W) x 28(D)mm







Scales & Vernier Calipers

WEIGHING SCALES

Digital Luggage Scale

Some budget airlines are now charging \$60 (yes, \$60!) per kilo for excess baggage, and reducing the allowance to as little as 15kg. If you're going travelling, especially anywhere in Europe, an accurate luggage scale bould be considered as exercised. should be considered an essential. It costs less than a third of a kilo of Ryanair excess baggage charges and the scale itself weighs only 90g. It also takes two common AAA batteries you can get anywhere in the world. Luggage not included



- Tare and auto-off
- Overload and low battery indication
- Dimensions: 122(L) x 85(H) x 25(D)mm





7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-7232	\$19.95	\$17.70	\$15.70

100g Mini-Pocket Scale

Truly pocket-size scales. Ideal for laboratory, diets, clinical, jewellery or lapidary work. They'll measure up to 100 grams with excellent resolution and weigh in grams, carats, pennyweight or ounces. 1 x CR2032 battery included.

- 60 second auto power-off
- Tare function
- 0.01g resolution
- Storage bag included
 Dimensions: 72(L) x 40(W) x 10(D)mm



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-7258	\$49.95	\$44.90	\$39.90

200q Mini-Scale with Backlight

Extremely accurate mini scale suitable for a variety of applications. The large LCD is backlit and a 200g calibration weight is included. Resolution is .01g and it weighs in grams, carats, ounces and pennyweight.

- 2 x AA batteries included
- Dimensions: 93(L) x 52(W) x 20(D)mm



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	OM-7259	\$69.95	\$62.95	\$55.95

1kg Digital Bench Scale

Precision 1kg electronic scale with resolution of 0.01g for when a high degree of accuracy is required. Weighs in grams, ounces, pounds, grains, carats, troy ounces and also supplied with a wind shield and a built-in bubble level to provide maximum accuracy. Particularly suited to calculating quantities as it counts pieces by weight. Powered by 4 x AA batteries (not included) or mains adaptor. Suitable for kitchen, lapidary, jewellery, reloading etc.

- Auto power-off after 60 secondsAutomatic calibration
- Backlit LCD
- Tare and counting function
- Mains powered
- Dimensions: 175(W) x 75(H) x 260(D)mm





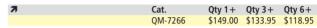
7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-7264	\$149.00	\$133.95	\$118.95

30kg Price Calculating Digital Bench Scale

Suitable for shops or markets where prices need to be calculated by weight. You simply input the unit price and the scale automatically calculates the total price, giving the vendor and the customer the same readout of total weight, unit price and total price from both sides of the scale.
It can be operated or charged from the mains, or used on site from the built-in 4Ah battery.

- Stainless steel table
- Weighs up to 30kg Tare and cumulative function
- 1g resolution
- Dual LED display Dimensions: 310(W) x 120(H) x 360(D)mm

Product available late 2012 subject to Weights & Measures compliance approval



VERNIER CALIPERS

Budget 150mm Digital Vernier Calipers



This carbon composite digital caliper is ideal for general use and situations where the cost of our precision stainless steel tool isn't justified. The digital display is calibrated in imperial and metric units with a corresponding vernier scale etched onto the caliper slide. While we wouldn't recommend you use this caliper to build the Space Shuttle, it's perfectly suited to the home handyperson who finds traditional calipers hard to read

JAYCAR QUALITY

BREAKTHROUGH PRICE

NEW & IMPROVED

- 150mm measurement range
- 0.1mm resolution8.3mm LCD character height
- 245mm Overall length (closed)
- Internal and external jaws

medades i x sit i i battery				
7	Cat.	Qty 1+	Qty 3+	Qty 6-
	TD-2081	\$9.95	\$8.75	\$7.75

150mm Digital Vernier Calipers



This precision instrument is made out of surgical grade stainless steel. It features a 5 finis precision instrument is indue out of surgical gradue stainless steer. It features a 5 digit LCD and will show readings in metric - 3 significant figures plus 2 decimal and in imperial - 2 significant figures and would you believe 3.5 decimal. (The fourth figure is either 0 or 5). The caliper can be zeroed at any point on the scale. A quality product at a fabulous price. Supplied with a sturdy clip-lock case with foam retainer and provision for spare battery.

- 0 150mm (0-6") range Resolution 0.01mm / 0.0005" (repeatability same)
- LR-44 battery powered (supplied)
 Battery life 12 months nominal
- Auto power off
- Operating temperature 0 40° Thumbscrew slide damper Case dimensions 250(L) x 90(W) x 27(D)mm

-	Case ullil	1611310113 230	ᇇᆫ	V 20(A	v / ^ 4	27(D)III	11.
•	Converts	millimeters	to i	nches	and	vice ve	rsa

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD 2002	\$20.05	¢27.05	\$22.70

IP54 Rated 150mm Digital Calipers



Soluble oil, grease, dust and swarf are just some of the hazards measurement tools have to deal with in a workshop. These calipers are IP54 rated to withstand all these nasties.

- Resolution: 0.01mm
- Auto power-off Case included
- · Battery included

• Metric and imperial conversion	i iii aiiy positioii			
7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2084	\$49.95	\$46.90	\$39.90

Flow Meters & Shunts

FLOW RATE METERS

This range of products is suitable for use in the monitoring of water storage and distribution. With the popularity of rainwater harvesting, we expect these products to be quite popular.

Electronic Flow Rate Meter

Completely self-contained, this unit only measures 60 x 40mm and includes a full LCD information display. It's supplied with a reed switch and piezo alarm. It operates from 2 x AAA batteries and a battery holder is included. When used in conjunction with the FS-300AH Digital Flowmeter (Cat. ZD-1202), it will count down (in litres) from a predetermined volume, for example 500 litres.



When 500 litres have gone through the flowmeter an alarm will sound. The alarm signal can be used to trigger another slave device. As it goes up to 99,500 litres, it could be used in larger-scale applications such as irrigation or just to let you know when it's time to clean a filter. It also reads flow rate, will remember data and operate in time mode.

An unbelievably fantastic product! Full data sheet and manual on our website.

 Dimensions: PCB/LCD: 60(L) x 40(W)mm





a	Cat.	Qty 1+	Qty 5+	Qty 10+
	ZD-1204	\$69.95	\$62.95	\$48.90

Digital Flowmeter, Reed Switch 0.6-8L/minute

Similar to ZD-1200, except that it operates at its best in a lower flow rate environment. It provides DC output pulses from a Hall sensor (open collector) - this output can be used to switch logic displays or could be used as a water metering unit. The body and impeller are made form acetal and the impeller is 304 stainless steel which means it will should work best with low viscosity fluids.

Full data supplied with each unit.



Specifications	
Switching voltage	200VDC max
Switching current	500mA max
Switching frequency	500 Hz max
Operating time	0.5 ms.
Release time	0.2 ms
Connection	1/4" BSP
Dimensions	77(L) x 29(W) x 41(H)mm
C	1 . 0. 5 . 0. 10

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	ZD-1202	\$49.95	\$44.90	\$34.90

Digital Flowmeter -Hall Type 1.5 - 25L/minute

With 1/2" BSP connections and 0 - 80°C temperature range, this unit could be used in hot water, (although we recommend operation in temperatures no higher than 45°C). It draws between 3 and 6mA over a supply range of 2.4 to 26VDC, making it ideal to be powered from a 12 volt battery if mains supply is not available. Simple DC output pulses in proportion to supply voltage and fluid flow make interfacing easy. The impeller is made from acetal and the shaft is stainless steel, so it will work with low viscosity fluids - we don't have any information available regarding its suitability for other fluids.



Data sheet on our website

Specifications			
Supply voltage	2.4 - 26VDC	Flow rate range	1.5 - 25 L/min
Supply current	Typical 3mA, maximum 6mA	Max working pressure	1MPa
Output mode	Open collector	Fluid temperature	0 ~ 80°C
Output rise time	Typical 1 second (max 10 seconds)	Environment temp	-20 ~ 80°
Output falling time	Typical 0.3 seconds (max 1.5 seconds)	Dimensions	70(L) x 31(W) x 31(H)mm

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	ZD-1200	\$49.95	\$44.90	\$34.90

HEAVY DUTY CURRENT SHUNTS

Placed in series with a high power circuit, these shunt bars allow you to measure high current draw without needing a high current ammeter. Heavy duty brass construction and hand calibrated, they include large terminals for connection of the main circuit cables and smaller terminals for connection to a meter. Suitable for use with a standard multimeter or panel meter you simply measure the millivolts across the shunt to display the current draw of the circuit. The 50mV models within the range are also compatible with many readily available power meters such as our MS-6172 Digital DC Power Meter

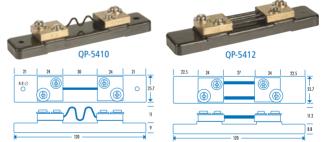
Cat	Max Current	Voltage at Max Current	Shunt Resistance	Accuracy
QP-5410		50mV	10mOhm	0.5%
QP-5412	50A	50mV	1m0hm	0.5%
QP-5414	100A	100mV	1mOhm	0.5%
QP-5415		50mV	0.5mOhm	0.5%
QP-5416		200mV	1m0hm	0.5%
QP-5417	200A	50mV	0.25mOhm	0.5%

NOTE: Care must be taken when using current shunts to measure DC circuits with common powered meters. Incorrect connection can cause a short circuit between the measuring terminal and the display power resulting in damage to the voltmeter. To avoid this issue the current shunt should be connected in series between the load and the power supply negative. Please see our website for more information.









MANUFACTURERS: WE HAVE A SHUNT SUPPLIER WHO IS IMPOSSIBLE TO BEAT FOR PRICES AND QUALITY. WE CAN SUPPLY CUSTOM SHUNTS IN QUANTITIES AS LITTLE AS 100 PIECES. CONTACT OUR WHOLESALE SUPPLIER FOR DETAILS





7	Max Current	Voltage at max current	Cat.	Qty 1+	Qty 5+	Qty 10+
	5A	50mV	QP-5410	\$12.95	\$11.35	\$10.35
	50A	50mV	QP-5412	\$12.95	\$11.35	\$10.35
	100A	100mV	QP-5414	\$19.95		
	100A NEW	50mV	QP-5415	\$19.95	\$17.70	\$15.70
	200A	200mV	QP-5416	\$19.95		
	200A NEW	50mV	QP-5417	\$19.95	\$17.70	\$15.70

PRODUCT DATA

We now have so much data and fact sheets we cannot fit it all here! Check our website for over 3,500 pages of data!



PANEL METERS - MU45

Panel Meters Style MU45 - Moving Coil Type

Overall Dimensions: 58(W) x 52(H)mm.

- Mounting hole centre 38 x 38mm
- 45mm meter hole
- MU45 Class 2 5

Cat.	Coil Resistance	Scale
QP-5010	200 Ω	0-1mA
QP-5012	3,000 Ω	0-50μΑ
QP-5013	0.05 Ω	0-1A
QP-5014	0.01 Ω	0-5A
QP-5015	0.005 Ω	0-10A
QP-5016	0.003 Ω	0-20A
QP-5020	20,000 Ω	0-20V
QP-5022	30,000 Ω	0-30V





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7	Cat.	Qty 1+	Qty 3+	Qty 6+
	Any of the above	\$17.95	\$15.95	\$14.35

Self-Powered LED Panel Meters

Simple and easy to install self-powered meters with voltage or current display. The voltmeter has a simple 2-wire connection, and the current meter has 4-wire connection with an included current shunt. Auto zero calibration and easy to read red LED display. Give your next project a truly professional look. Perfect for automotive, caravan or 4WD use.

- Cutout size 42 x 23mm
- Easy installation
- Reverse Polarity protectionAuto zero calibration
- Self powered

LED VOLTMETER 0 - 30V DC CAT QP-5586



Current shunt included

Note! When connecting the ammeter QP-5588 it is essential that the wiring instructions provided with the product are followed, or the meter may be destroyed.

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	QP-5586	\$24.95	\$22.35	\$19.70
	OP-5588	\$39.95	\$35.90	\$31.90

12V/24V Battery Monitoring System with 2.8" Touch Screen

In mobile power applications such as caravan, RV, marine, etc, being able to actively monitor the condition of your battery bank is both useful and prudent to ensuring you keep your batteries in top condition. Measuring the battery voltage alone is one method of monitoring a battery, but doesn't give a very clear picture of how much charge you actually have left. Using state of the art algorithms to measure current (and correct for Peukert's law), this battery monitor accurately measures the state of charge of the battery, giving you not only a battery voltage, but an actual amp-hour capacity or percentage remaining. Simply install the current shunt in line with your battery, and the unit accurately measures what is going into and out of your battery bank, displaying information on the screen accordingly. Scrolling through information and programming is made simple with the touch screen interface and simple menus. and programming is made simple with the touch screen interface and simple menus. Additional features include programmable auxiliary outputs, dual battery isolation (external solenoid required), power consumption logging, multiple information screens, and alarm functions.

Features

- Displays battery capacity similar to a fuel gauge
- Uses proper "state of charge" algorithms
 Displays both voltage and Ah capacity of the battery
 Start battery and house battery voltage display
- Dual battery isolation control (with external solenoid)
 Programmable relay outputs can be used for low voltage disconnect/reconnect, remote generator start, etc.
- Touch screen input for user control and programming
 Full colour TFT display
 Suitable for 12V or 24V battery systems
 Panel mount full colour display

Specifications	
Measuring current	+/-500A max
Supply voltage	4-30VDC
Current consumption	35-190mA
Sample rate	3S/s
Panel cutout	84x54mm
Dimensions	89(W) x 57(H) x 20(D)mm



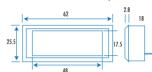
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	MS-6180	\$249.00	\$225.00	\$198.95

PANEL METERS

Common Specification	ıs for QP-5570, QP-5580 & QP-5585:
Polariy	Automatic (-) for negative value
Decimal point	User selectable
Input	Analogue
Full scale range	200mV
Configuration	True differential input and reference
Impedence	10ΜΩ
Conversion rate	2.5 per second
Zeroing	Automatic
Operating temp	Standard 0 to 50°C

3.5 Digit LCD Panel Meter

- · Attractive modern bezel
- Snap retaining into panel
- Shallow depth
- 0.1" launcher connections
- See above for additional specifications





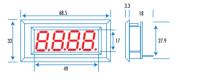
LCD				
3 1/2 digits (1999	9) 12.7mm figure	e height		
5V powered				
Display flashes "1	1"			LIERR
±(0.1%rdg.+1d	gt.)			WARRANTU
13 pins				
60.5(W) x 24(H)n	nm			
	Cat.	Qty 1+	Qty 5+	Qty 10+
	QP-5570	\$27.95	\$24.95	\$22.35
	3 1/2 digits (1999) 5V powered Display flashes " ± (0.1%rdg.+1d 13 pins 62(W) x 25(H) x 1	3 1/2 digits (1999) 12.7mm figure 5V powered Display flashes "1" ±(0.1%rdg.+1dgt.) 13 pins 62(W) x 25(H) x 15(D)mm 60.5(W) x 24(H)mm Cat.	3 1/2 digits (1999) 12.7mm figure height 5V powered Display flashes "1" ± (0.1%rdg, +1dgt.) 13 pins 62(W) x 25(H) x 15(D)mm 60.5(W) x 24(H)mm Cat. Qty 1+	3 1/2 digits (1999) 12.7mm figure height 5V powered Display flashes "1" ±(0.1%rdg.+1dgt.) 13 pins 62(W) x 25(H) x 15(D)mm 60.5(W) x 24(H)mm Cat. Qty 1+ Qty 5+

Need to measure current? See current shunts on the left.

3.5 Digit LED Panel Meter

- Surface mount construction for reliability
- 0.1" launcher connections
 Brightness matched superbright LEDs
- Attractive bezel with mounting clips
- 5V powered, TTL compatible common ground
- See above for additional specifications





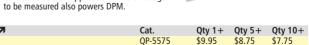


7	Cat.	Qty 1+	Qty 5+	Qty 10+
	QP-5580	\$29.95	\$26.90	\$23.70

Add On Board For QP-5570/80

This add on board makes it easy to set the range and decimal point on our QP-5570 or 80 panel meters. The ranges can be permanently set with a solder bridge or wired to a switch for selectable

- ranges.
 No 200mV range on QP-5580
- Cannot be used in applications where voltage to be measured also powers DPM.





Panel Meters

PANEL METERS (CONTINUED)

3.5 Digit Jumbo LED Panel Meter

This is not just a digital display, but a fully functional high impedance digital panel meter that only requires power to operate. It will measure voltages from 200mV to 500VDC (jumper selectable) and has a maximum count of 1999. The module is suitable for a host of applications and can be used as a voltmeter or adapted for use as a current meter, thermometer etc. The decimal point location can be selected with a jumper and the module uses an easy "plug-in" fixing method. The meter shares a common ground with the voltage being measured.





Specifications	
Type of display	LED
Digits	3.5 Digits (1999) 20.3mm figure height
Power	5VDC, common ground, 60mA typical
Over range	"1" shown on display
Accuracy	±0.5%
Size	85(W) x 42(H) x 25(D)mm
Panel cutout size	84(W) x 41(H)mm



7	Cat.	Qty 1+	Qty 5+	Qty 10+
	QP-5585	\$34.95	\$31.45	\$27.90

LCD MODULES

LCD Panel 2 Line 16 Character - Wide Viewing Angle



QP-5517 Without BACKLIGHT





QP-5518 With BACKLIGHT

Actual stock will vary from photographs

Specifications	QP-5517 / QP-5518
Type	2 line LCD
Characters	16 x 2 lines
Character size	4.89 x 2.78mm
Viewing angle - vertical	Sym 0 condition: CR>=2°, Min -10° Max 40°
Viewing angle - horizontal	Sym 0 condition: CR>=2°, Min -30° Max 30°
Supply voltage for logic	SÝN: VDD - VSS Min 4.5V Typ 5V Max 5.5V
Other mechanical data	STN, yellow green, 1/16 duty, 6 o'clock
Module dimensions	85(W) x 30(H) x 13.2(D)mm
Viewing display area	65(W) x 16(H)mm

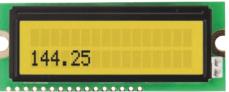
7		Cat.	Qty 1+	Qty 10+	Qty 25+
	Without Backlight	QP-5517	\$24.95	\$22.35	\$17.35
	With Backlight	OP-5518	\$29.95	\$26.90	\$20.70

AUTOMATIC ACCOUNT

For Schools, Government Departments, Public Companies, Radio & TV Stations

LCD Panel 2 Line 16 Character Compact with Backlight & SIL Connections

This compact LCD module has 96 inbuilt ASCII characters as well as 92 special letters and 8 custom characters, which can be displayed on a 16 character by 2 line screen. It will hold the current input on the display using its own built in memory, making it easy to drive. Connections via single in line solder pads with an independent backlight.



Specifications					
Type	2 line LCD				
Characters	16 x 2 lines	16 x 2 lines			
Supply voltage	5VDC				
Power Supply Current	2mA				
Duty	1/16				
Module dimensions	66(W) x 26(H) x 12(D)mm				
Viewing display area	51(W) x 14.8(H)mm				
7	Cat.	Qty 1+	Qty 5+	Qty 10+	

QP-5512

\$17.70 \$15.70

Dot Matrix Liquid Crystal Display Modules Alphanumeric - Large Display

Large character size LCD. Can be viewed from further distances and also handy when the panel needs to be mounted behind Perspex for protection.





Alphanumeric, 2 line LCD
16 x 2 lines
9.7 x 4.9mm
Sym 0 condition: CR>=2°, Min -10° Max 40°
Sym 0 condition: CR>=2°, Min -30° Max 30°
SYN: VDD - VSS Min 4.5V Typ 5V Max 5.5V
STN, yellow green, 1/16 duty, 6 o'clock
122(W) x 44(H) x 13.2(D)mm
99(W) x 24(H)mm

7	Cat.	Qty 1+	Qty 10+	Qty 25+
	OP-5520	\$39.95	\$35.90	\$27.90

Dot Matrix Liquid Crystal Display Modules Alphanumeric

Compact Liquid Crystal Diode module with ASCII (96 characters), Special Letters (92 characters) and Custom Letters (8 characters). A two line screen displays up to 16 characters at a time and the module will hold the current display in its own inbuilt memory.





Specifications	QP-5515 & QP-5516				
Type	Alphanumeric, 2 line LCD				
Characters	16 x 2 lines				
Character size	4.89 x 2.78mm				
Viewing angle - vertical	Sym 0 condition: CR>=2°, Min -10° Max 40°				
Viewing angle - horizontal	Sym 0 condition: CR>=2°, Min -30° Max 30°				
Supply voltage for logic		SYN: VDD - VSS Min 4.5V Typ 5V Max 5.5V			
Other mechanical data	STN, yellow green, 1/16 du	ity, 6 o'clock			
Module dimensions	85(W) x 30(H) x 13.2(D)mm	า์			
Viewing display area	65(W) x 16(H)mm				
7	Cat.	Qty 1+	Qty 10+	Qty 25+	

	cut.	Qty I I	Qty IO I	Qty 23 i	
Without Backlight	QP-5515	\$15.95	\$14.35	\$10.95	
With Backlight	QP-5516	\$17.95	\$15.95	\$12.35	

Connectors - RCA

CONNECTORS, PLUGS & SOCKETS

Our 2012 range of connectors has expanded, but only slightly. The now popular "keystone" type wallplate connectors have expanded. We have also added some new header plugs for our

popular Arduino micro computer line. Finally we have expanded (at long last) our range of crimp-type eyelet terminals (page 195).



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RCA / PHONO

RCA PLUGS

PLUGS - PLASTIC Economy style.



		Qty I+	Qty 10+	Qty 50+
Blue	PP-0238	\$0.68	\$0.60	\$0.52
Green	PP-0239	\$0.68	\$0.60	\$0.52
Red	PP-0240	\$0.68	\$0.60	\$0.52
Black	PP-0242	\$0.68	\$0.60	\$0.52
Yellow	PP-0243	\$0.68	\$0.60	\$0.52
White	PP-0244	\$0.68	\$0.60	\$0.52

PREMIUM GOLD PLATED METAL BODY RCA PLUGS



		Qty 1+	Qty 10+	Qty 50+
Red	PP-0230	\$3.95	\$3.45	\$3.15
Black	PP-0232	\$3.95	\$3.45	\$3.15
Yellow	PP-0231	\$3.95	\$3.45	\$3.15
White	PP-0233	\$3.95	\$3.45	\$3.15
Blue	PP-0234	\$3.95	\$3.45	\$3.15
Green	PP-0235	\$3.95	\$3.45	\$3.15

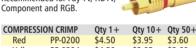
METAL BODY RCA PLUGS WITH CABLE PROTECTION SPRING



NICKEL		Qty 1+	Qty 10+	Qty 50+				
	PP-0245	\$1.95	\$1.75	\$1.55				
GOLD PLAT	GOLD PLATED 7mm Cable							
Red	PP-0236	\$3.25	\$2.90	\$2.60				
Rlack	PP_0227	¢2 25	\$2.00	\$2.60				

COMPRESSION CRIMP RCA

For high end audio and video. Recommended for Pay TV, HDTV, Component and RGB.



COMPRESSI	ON CRIMP	Qty 1+	Qty 10+	Qty 50+
Red	PP-0200	\$4.50	\$3.95	\$3.60
Yellow	PP-0204	\$4.50	\$3.95	\$3.60
White	PP-0203	\$4.50	\$3.95	\$3.60
Blue	PP-0201	\$4.50	\$3.95	\$3.60
Green	PP-0202	\$4.50	\$3.95	\$3.60
Yellow White Blue	PP-0204 PP-0203 PP-0201	\$4.50 \$4.50 \$4.50	\$3.95 \$3.95 \$3.95	\$3.60 \$3.60 \$3.60

PROFESSIONAL EARTH FIRST RCA PLUGS

These use a retractable earth sleeve which ensures the earth path is connected before the signal. Very important when working with powered equipment.

• Pro quality with gold plating.

EARTH FII	RST	Qty 1+	Qty 10+	Qty 50+
Red	PP-0222	\$7.95	\$6.95	\$6.25
Black	PP-0224	\$7.95	\$6.95	\$6.25

CRIMPLESS RG6 PLUGS

Crimpless and solderless. All metal construction, requiring no tools to fit.

PP-0205 Crimpless RCA Plug Red PP-0206 Crimpless RCA Plug Yellow PP-0207 Crimpless RCA Plug White PP-0208 Crimpless RCA Plug Blue PP-0209 Crimpless RCA Plug Green



7	Cat.	Qty 1+	Qty 10+	Qty 50+
	PP-0205	\$3.50	\$3.15	\$2.75
	PP-0206	\$3.50	\$3.15	\$2.75
	PP-0207	\$3.50	\$3.15	\$2.75
	PP-0208	\$3.50	\$3.15	\$2.75
	PP-0209	\$3.50	\$3.15	\$2.75

Inserts for Keystone Wallplates

A range of inserts to cater for computer and Audio video applications. They fit standard 110 keystone wallplates and allow you to configure your installation any way you like.



PS-0761





PS-0773

Toslink - Toslink	Cat PS-0749
USB - USB Female	Cat PS-0753
F81 - F81 - White	Cat PS-0761
BNC - BNC - White	Cat PS-0763
RCA - RCA Socket - White	Cat PS-0764
RCA - RCA - Red	Cat PS-0765
RCA - RCA - Yellow	Cat PS-0767
RCA - RCA - Blue	Cat PS-0794 NEV
RCA - RCA - Green	Cat PS-0798 NEV
S-Video - S-Video	Cat PS-0769
HDMI - HDMI - White	Cat PS-0771
USB - USB - White	Cat PS-0773
4mm Banana - 4mm Banana - Red	Cat PS-0774
4mm Banana - 4mm Banana - Black	Cat PS-0775
3.5mm Stereo Socket	Cat PS-0777
Blank	Cat PS-0779
USB 3.0 - USB 3.0 - White	Cat PS-0799

See page 234, 316 for Wallplates to suit

7	Cat.		Qty 1+	Qty 5+	Qty 10+
	PS-0749		\$3.95	\$3.45	\$3.15
	PS-0753		\$6.95	\$6.25	\$5.50
	PS-0761		\$2.95	\$2.60	\$2.30
	PS-0763		\$2.95	\$2.60	\$2.30
	PS-0764		\$2.95	\$2.60	\$2.30
	PS-0765		\$2.95	\$2.60	\$2.30
	PS-0767		\$2.95	\$2.60	\$2.30
	PS-0794	NEW	\$2.95	\$2.60	\$2.30
	PS-0798	NEW	\$2.95	\$2.60	\$2.30
	PS-0769		\$3.95	\$3.45	\$3.15
	PS-0774		\$2.95	\$2.60	\$2.30
	PS-0775		\$2.95	\$2.60	\$2.30
	PS-0777		\$2.95	\$2.60	\$2.30
	PS-0779		\$0.30	\$0.25	\$0.24
	PS-0771		\$12.95	\$11.35	\$10.35
	PS-0773		\$6.95	\$6.25	\$5.50
	PS-0799		\$12.95	\$11.35	\$10.35

Connectors - RCA

RCA LINE SOCKETS

RCA (PHONO) LINE SOCKETS Plastic Economy style.



	Cat.	Qty 1+	Qty 10+	Qty 50+
Red	PS-0250	\$0.60	\$0.52	\$0.47
Black	PS-0252	\$0.60	\$0.52	\$0.47

METAL BODY RCA SOCKETS WITH CABLE PROTECTION SPRING



RCA Chassis Sockets

NICKEL PLATED



NICKEL PLATED		Qty 1+	Qty 10+	Qty 50+	
	Black	PS-0256	\$0.95	\$0.85	\$0.75
	Red	PS-0257	\$0.95	\$0.85	\$0.75
	Yellow	PS-0255	\$0.95	\$0.85	\$0.75

RCA CHASSIS SOCKETS - GOLD

NON INSULATED Various colured inserts

DUDECTORS



GOLD PLATE	D	Qty 1+	Qty 10+	Qty 50+
Black	PS-0258	\$1.95	\$1.75	\$1.55
Red	PS-0259	\$1.95	\$1.75	\$1.55
Yellow	PS-0260	\$1.95	\$1.75	\$1.55
White	PS-0261	\$1.95	\$1.75	\$1.55
GOLD PLATED				
Blue	PS-0270	\$1.95	\$1.75	\$1.55
Green	PS-0271	\$1.95	\$1.75	\$1.55

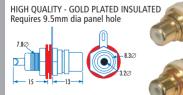
RCA SOCKET MOUNTING KIT This kit allows you to mount and insulate RCA sockets in a metal panel. The RCA sockets suited are single hole types PS-0256/7 and PS-0258 gold.



- Pkt 10 plastic grommets and fibre washers
- Essential where earth loop hum is a problem

MOUNTING K	(IT	Qty 1+	Qty 10+	Qty 50+
Pkt 10	HP-1180	\$4.95	\$4.45	\$3.90

RCA CHASSIS SOCKETS - GOLD

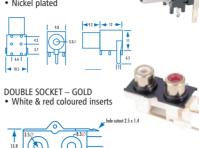


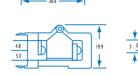
GOLD PLATE	D INS.	Qty 1+	Qty 10+	Qty 50+	
Red	PS-0276	\$3.95	\$3.45	\$3.15	
Black	PS-0277	\$3.95	\$3.45	\$3.15	
Yellow	PS-0275	\$3.95	\$3.45	\$3.15	
White	PS-0278	\$3.95	\$3.45	\$3.15	

RCA PCB Sockets

RCA RIGHT ANGLE SOCKET.

- · Black insert only
- Nickel plated





RIGHT ANGLE	Qty 1+	Qty 10+	Qty 50+
PS-0279	\$1.45	\$1.30	\$1.15
DOUBLE SOCKET - VERTCIAL			
PS-0280	\$1.95	\$1.75	\$1.55

PA-367

PA-3655

RCA Plug to Adaptors



RCA PLUG TO 6.5MM MONO SKT



RCA MALE TO F-81 SOCKET

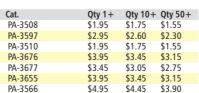


RCA MALE TO





Allows a RCA lead to enter an amplifier from the side and the leads plug in neatly. Short compact body.



\$3.95

RCA ADAPTORS SOCKETS

RCA FEMALE TO RCA FEMALE

RCA PLUG TO 2 X RCA SOCKET



1 X RCA SOCKET TO 2 X RCA SOCKET

RCA SOCKET TO **RCA SOCKET** Pkt 2

Gold plated



PA-359

3 X RCA SOCKET TO 3 X RCA SOCKET

· Red, white & yellow

Gold plated



RCA SOCKET TO BNC SOCKET

DOUBLE ADAPTOR

RCA plug to socket, with a second socket at right angles. Ideal for car stereo applications.

• Gold plated



Cat.	Qty 1+	Qty 10+	Qty 50+
PA-3598	\$2.95	\$2.60	\$2.30
PA-3560	\$3.95	\$3.45	\$3.15
PA-3562	\$3.95	\$3.45	\$3.15
PA-3599	\$5.95	\$5.25	\$4.75
PA-3564	\$7.95	\$6.95	\$6.25
PA-3678	\$3.95	\$3.45	\$3.15
PA-3570	\$5.95	\$5.25	\$4.75

PANEL MOUNT - RCA SOCKET TO SOCKET

Gold plated, panel mounted RCA socket to RCA socket adaptors.

Yellow	Cat. PS-0441	Green	Cat. PS-0444
Red	Cat. PS-0442	Blue	Cat. PS-0445
Black	Cat. PS-0443	White	Cat. PS-0446

Insulated



Allows you to plug straight into the back of the socket PANEL MOUNT Qty 1+ Qty 10+ Qty 50+

Yellow	PS-0441	\$3.50	\$3.15	\$2.75
Red	PS-0442	\$3.50	\$3.15	\$2.75
Black	PS-0443	\$3.50	\$3.15	\$2.75
Green	PS-0444	\$3.50	\$3.15	\$2.75
Blue	PS-0445	\$3.50	\$3.15	\$2.75
White	PS-0446	\$3.50	\$3.15	\$2.75

RCA STYLE ADAPTOR LEADS

In addition to the products above, we also have a large range of interconnection leads with RCA plugs

\$3.15

\$3.45

or sockets on one end and RCAs - or many other types on the other.

PA-3560

WALLPLATES

Wallplate Inserts For AV Outlets

This series of blank wallplate inserts and AV connectors are designed to provide custom audio/video outlets. Provide stereo line level audio to a house or office, for example, or install cable TV outlets throughout the house. All fit standard household power point bases and brackets. The AV connectors fit only one way in the plates, so you have a front and rear connection.

BLANK WALLPLATE WITH CUTOUT

• Designed for Aust/NZ standard GPO mounting pitch



3 WAY WALLPLATE INSERT



4 WAY WALLPLATE INSERT



BANANA SOCKET / **BINDING POST**

SPEAKER WIRE

BINDING POST

 Will also accept a banana plug

Connectors - Wallplates & Inserts

GOLD PLATED CONNECTORS

For use with Wallplates

Banana socket front, binding post input rear for speaker cable

F-61 SOCKET / F-61SOCKET

• F-61 socket both front and back.

BLANK PLATE





Qty 1+ Qty 2+ Qty 5+

	PS-0480	\$2.50	\$2.21	\$1.95
1 WAY	PLATE			
	PS-0481	\$2.95	\$2.60	\$2.30
2 WAY	PLATE			
	PS-0482	\$2.95	\$2.60	\$2.30
3 WAY	PLATE			
	PS-0483	\$2.95	\$2.60	\$2.30
4 WAY	PLATE			
	PS-0484	\$2.95	\$2.60	\$2.30
6 WAY	PLATE			
	PS-0485	\$2.95	\$2.60	\$2.30
8 WAY	PLATE			
	PS-0486	\$2.95	\$2.60	\$2.30
BINDIN	IG POST			
Red	PS-0490	\$3.95	\$3.45	\$3.15
Black	PS-0491	\$3.95	\$3.45	\$3.15
BANAN	A			
Red	PS-0492	\$2.95	\$2.60	\$2.30
Black	PS-0493	\$2.95	\$2.60	\$2.30
RCA / F	-61			
	PS-0494	\$2.45	\$2.15	\$1.95
RCA / S				
Blue	PS-0489	\$2.45	\$2.15	\$1.95
Red	PS-0495	\$2.45	\$2.15	\$1.95
Black	PS-0496	\$2.45	\$2.15	\$1.95
	PS-0497	\$2.45	\$2.15	\$1.95
Green		\$2.45	\$2.15	\$1.95
F-61 / F				
	PS-0498	\$2.45	\$2.15	\$1.95

1 WAY WALLPLATE INSERT



6 WAY WALLPLATE INSERT



2 WAY WALLPLATE INSERT



8 WAY WALLPLATE INSERT



F-61 SOCKET

RCA SOCKET /

 RCA socket on front and F-61 socket on back for easy termination of coax cables



rear



RCA (Phono) Wallplates

Standard power point size. · White & red inserts



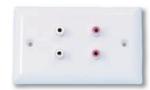
3 WAY (AV)

Standard power point size.



4 WAY (2 X STEREO)

Standard power point size White & red coloured inserts



2 WAY	Qty 1+	Qty 2+	Qty 5+
PS-0292	\$7.95	\$6.95	\$6.25
3 WAY			
PS-0293	\$8.95	\$7.95	\$6.95
4 WAY			
PS-0294	\$9.95	\$8.75	\$7.75

RCA PHENOLIC SOCKETS











4 WAY - GOLD PLATED









1 WAY	Qty 1+	Qty 10+	Qty 50+
PS-0262	\$0.95	\$0.85	\$0.75
2 WAY			
PS-0263	\$1.25	\$1.10	\$0.97
4 WAY			
PA-0265	\$1.75	\$1.55	\$1.40
4 WAY GOLD PLATED			
PA-0266	\$3.45	\$3.05	\$2.75
6 WAY			
PS-0268	\$3.95	\$3.45	\$3.15

VGA Plug to Socket - 90°

VGA plug to socket right angle adaptor.

· Available with the socket angles up or down

Socket Angled Up $P\Delta_-\Omega QQQ$ Socket Angled Down PA-0899

7	Cat.	Qty 1+	Qty 10+	Qty 50+
	PA-0898	\$8.95	\$7.95	\$6.95
	PA-0899	\$8.95	\$7.95	\$6.95

15 Pin VGA Socket Wallplate

A wallplate that can be used on projectors, monitors and high end TVs. Comes with mounting hardware, screws and screw mounting centres for easy flush mount installation. Installation is made easy via the screw terminal

on the rear mounted PCB



Rear connections

Cat.	Qty 1+	Qty 2+	Qty 5+
PT-0476	\$19.95	\$17.70	\$15.70

VGA Wallplate with 3.5mm Audio Socket

Standard wallplate with VGA and 3.5mm audio socket.



7	Cat.	Qty 1+	Qty 5+	Qty 10+
	PT-0477	\$24.95	\$22.35	\$19.70

2.5MM

Jack Plug - also known as a phone plug (US) or TRS (tip, ring, sleeve). Available as mono or stereo versions in several common diameters:

- 2.5mm the smallest size used where space is a premium. Was once used as a mono earphone plug but now has multichannel functions.
- 3.5mm the mini plug, which in the stereo version is widely found on headphones used with portable audio such as MP3 players etc. It is also a standard connector used on PC sound cards. The mono version is occasionally used as a DC power connector.
- 6.5mm the largest size; the mono version is used on guitar & microphone leads, while the stereo version is often used on Hi-Fi headphones. The 6.5mm (or 1/4" phone plug) was originally used for manual telephone switchboards particularly the 'Sylvester' type

2.5mm Subminiature Plugs



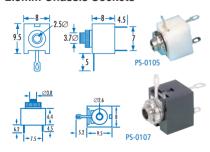
MONO	Qty 1+	Qty 10+	Qty 50+	
PP-0100	\$0.75	\$0.65	\$0.60	
STEREO				
PP-0103	\$1.25	\$1.10	\$0.97	
STEREO R/A				
PP-0104	\$3.95	\$3.45	\$3.15	
4 CONTACT				
PP-0101	\$2.95	\$2.60	\$2.30	

2.5mm Line Socket



STEREO	Qty 1+	Qty 10+	Otv 50+
JILIKLO	Qty i i	Qty io i	Qty Jo .
PS-0109	\$1.95	\$1.75	\$1.55

2.5mm Chassis Sockets



MONO	Qty 1+	Qty 10+	Qty 50+
PS-0105	\$0.95	\$0.85	\$0.75
STEREO			
PS-0107	\$1.95	\$1.75	\$1.55

2.5mm Surface Mount Sockets



2.5mm Adaptors

2.5MM STEREO **PLUG TO 3.5MM STEREO RIGHT ANGLE SOCKET**



2.5MM MONO PLUG TO 6.5MM MONO SOCKET



2.5MM STEREO **PLUG TO 3.5MM STEREO SOCKET**



	Qty 1+	Qty 10+	Qty 50+
PA-3502	\$3.95	\$3.45	\$3.15
PA-3504	\$1.95	\$1.75	\$1.55
PA-3532	\$3.95	\$3.45	\$3.15

3.5MM

3.5mm Miniature Plugs



Qty 1+	Qty 10+	Qty 50+
\$0.85	\$0.75	\$0.65
\$1.25	\$1.10	\$0.97
\$4.95	\$4.45	\$3.90
\$1.85	\$1.65	\$1.45
	\$0.85 \$1.25 \$4.95	\$0.85 \$0.75 \$1.25 \$1.10 \$4.95 \$4.45

METAL PLUGS WITH CABLE PROTECTION SPRING



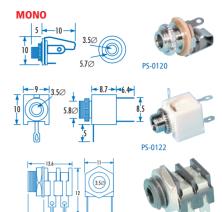
MONO	Qty 1+	Qty 10+	Qty 50+
PP-0116	\$1.45	\$1.30	\$1.15
STEREO			
PP-0135	\$1.85	\$1.65	\$1.45
STEREO GOLD PLATED			
PP-0131	\$2.45	\$2.15	\$1.95

3.5mm LINE SOCKETS

Freecall order hotline: 1800 022 888

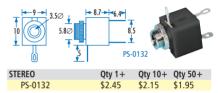


3.5mm Chassis Sockets

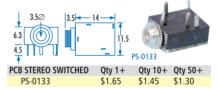


MONO OPEN	Qty 1+	Qty 10+	Qty 50+
PS-0120	\$1.45	\$1.30	\$1.15
MONO ENCLOSED			
PS-0122	\$0.95	\$0.85	\$0.75
MONO INSULATED			
PS-0123	\$2.45	\$2.15	\$1.95

STEREO



3.5mm PCB Socket



3.5mm Adaptors - Mono



SOCKET	3		
	Qty 1+	Qty 10+	Qty 50+
PA-3500	\$1.95	\$1.75	\$1.55

3.5MM (CONTINUED)

3.5mm Adaptors - stereo

3.5MM STEREO PLUG **TO 6.5MM STEREO** SOCKET



3.5MM STEREO **PLUG TO 3.5MM STEREO RIGHT ANGLE SOCKET**



3.5MM STEREO **PLUG TO 2.5MM STEREO SOCKET**



3.5MM STEREO **PLUG TO** 2 X 3.5MM STEREO **SOCKETS**



3.5MM STEREO **PLUG TO 2 X RCA SOCKETS**



3.5MM STEREO **SOCKET TO 2 X 3.5MM MONO PLUG**

Aeroplane adaptor - allows you to use your own headphones in planes fitted with 2 x 3.5mm sockets.



3.5MM PLUG TO **PAL (75 OHM) SOCKET**



	Qty 1+	Qty 10+	Qty 50+
PA-3586	\$2.95	\$2.60	\$2.30
PA-3503	\$3.95	\$3.45	\$3.15
PA-3536	\$3.95	\$3.45	\$3.15
PA-3657	\$3.95	\$3.45	\$3.15
PA-3582	\$3.95	\$3.45	\$3.15
PA-3580	\$3.95	\$3.45	\$3.15
PA-3581	\$5.95	\$5.25	\$4.75

3.5MM STEREO **SOCKET TO** 3.5MM STEREO SOCKET



	Qty 1+	Qty 10+	Qty 50+
PA-3583	\$1.95	\$1.75	\$1.55

3.5MM STEREO SOCKET TO 2 X RCA SOCKETS ADAPTOR



	PA-3585			
		Qty 1+	Qty 10+	Qty 50+
PA-3585		\$2.55	\$2.25	\$1.95

6.5MM 1/4"

6.5mm 1/4" Plugs **PLUGS - LINE**





PP-0156













MONO		Qty 1+	Qty 10+	Qty 50+
Plastic	PP-0150	\$1.00	\$0.90	\$0.80
Metal	PP-0154	\$1.85	\$1.65	\$1.45
Gold	PP-0156	\$3.65	\$3.15	\$2.90
Red	PP-0151	\$4.95	\$4.45	\$3.90
Black	PP-0152	\$4.95	\$4.45	\$3.90
STEREO				
Plastic	PP-0170	\$1.45	\$1.30	\$1.15
Metal	PP-0174	\$2.45	\$2.15	\$1.95
Gold	PP-0175	\$3.95	\$3.45	\$3.15
Red	PP-0177	\$4.95	\$4.45	\$3.90
Black	PP-0178	\$4.95	\$4.45	\$3.90

6.5mm PRO METAL PLUGS

Made especially for the rigours of the road or anywhere where a heavy duty, tough 6.5mm plug is called upon. The mono plugs feature blue identification rings, whereas the stereo plugs have black rings. This is particularly handy if you have a combination of stereo and mono plugs on the one mixing desk or patch bay.



MOI	NO METAL - PRO	Qty 1+	Qty 10+	Qty 50+
F	PP-0157	\$6.95	\$6.25	\$5.50
STE	REO METAL - PRO			
F	PP-0179	\$7.50	\$6.75	\$5.95

RIGHT ANGLE PLUGS

Super tough all metal construction plug for harsh environments and musos who want the best.
• Use with 6mm O.D. cable

- · Strain relief provided.



PRO RIGHT ANGLE	Qty 1+	Qty 10+	Qty 50+
PP-0159	\$4.95	\$4.45	\$3.90
RIGHT ANGLE			
PP-0158	\$1.95	\$1.75	\$1.55
STEREO RIGHT ANGLE			
PP-0176	\$2.50	\$2.21	\$1.95

RELATED PRODUCT

For a great range of screened audio cable to suit these products see page 202.

6.5mm 1/4" Line Sockets



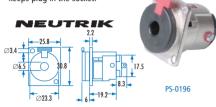
MONO	Qty 1+	Qty 10+	Qty 50+
PS-0166	\$1.65	\$1.45	\$1.30
STEREO			
PS-0194	\$1.95	\$1.75	\$1.55

6.5MM 1/4" (CONTINUED)

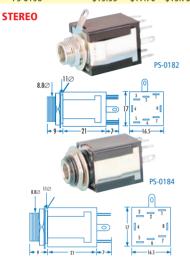
6.5mm 1/4" Chassis Sockets



PROFESSIONAL LOCKING CHASSIS JACK Metal shell, mates with all mono and stereo 6.5mm (1/4") phono plugs. Plug locking feature keeps plug in the socket.



MONO OPEN UNSWITCHED	Otv 1+	Qty 10+	Otv 50+	
PS-0162	\$1.95	\$1.75	\$1.55	
MONO & STEREO				
PS-0196	\$19.95	\$17.70	\$15.70	



STEREO SWITCHED DPDT	Qty 1+	Qty 10+	Qty 50+
PS-0182	\$2.95	\$2.60	\$2.30
STEREO IN. SWITCHED			
PS-0184	\$3.45	\$3.05	\$2.75

Ever tried to mount a 6.5mm socket in a wooden box? It was impossible! Now it's easy with our unique plastic mounting aid



SOCKET MOUNTING CUP	Qty 1+	Qty 5+	Qty 10+
HS-8025	\$2.50	\$2.21	\$1.95

6.5mm PCB / Chassis Sockets

MONO INSULATED



SWITCHED Qty 1+ Qty 10+ Qty 50+ PS-0160 \$2.45 \$2.15

6.5mm PCB / Chassis Sockets (cont)

INSULATED DPST SWITCHED - STEREO

Works ok in mono PS-0190

INSULATED UNSWITCHED - STEREO



HIGH QUALITY -

- Switching DPST. Black plastic
- front panel insert Glossy chrome-finish mounting nut.
- Stereo, but can be used for mono
- Minimum Life: 10,000 insert/ withdraw cycles Contact Rating: 2.5A at 48VDC

	3						
STEREO INSULATED DPST SWITCHED							
		Qty 1+	Qty 10+	Qty 50+			
	PS-0190	\$2.95	\$2.60	\$2.30			
STEREO INSULATED UNSWITCHED							
	PS-0192	\$2.75	\$2.45	\$2.15			
STEREO							
	PS-0180	\$2.95	\$2.60	\$2.30			

	Qty I T	Qty 10 T	QLy JUT
PS-0190	\$2.95	\$2.60	\$2.30
STEREO INSULATED U	NSWITCHED		
PS-0192	\$2.75	\$2.45	\$2.15
STEREO			
PS-0180	\$2.95	\$2.60	\$2.30
STEREO			
PS-0195	\$5.95	\$5.25	\$4.75

6.5mm Adaptors

3.5MM MONO SOCKET TO 6.5MM MONO **PLUG**



6.5MM MONO **PLUG TO RCA SOCKET**

6.5MM MONO PLUG TO 2 X 6.5MM MONO SOCKETS



PA-3592

6.5MM STEREO PLUG TO 3.5MM STEREO SOCKET



6.5MM STEREO PLUG TO 2 X 6.5MM **STEREO SOCKETS**



6.5MM STEREO **SOCKET TO** 6.5MM STEREO SOCKET



Qty 1+	Qty 10+	Qty 50+
\$1.95	\$1.75	\$1.55
\$1.95	\$1.75	\$1.55
\$3.95	\$3.45	\$3.15
\$1.95	\$1.75	\$1.55
\$3.95	\$3.45	\$3.15
\$3.95	\$3.45	\$3.15
	\$1.95 \$1.95 \$3.95 \$1.95 \$3.95	\$1.95 \$1.75 \$1.95 \$1.75 \$3.95 \$3.45 \$1.95 \$1.75 \$3.95 \$3.45

STOP PRESS - LAST MINUTE NEW PRODUCTS STOP PRESS - LAST MINUTE NEW PRODUCTS STOP PRESS - LAST MINUTE NEW

CHARGER LEADS FOR REMOTE CONTROL VEHICLES & TOYS

A range of charger, power and test cables with banana plugs, alligator clips and JST connectors. These are commonly used for toys, robotics, models, remote control hobby.

Female JST to 4mm Banana **Plug Charger Cable**

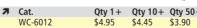
Commonly used for charging battery packs with JST plugs. The banana plugs connect to power source or charger with banana sockets.

- 22AWG PVC wire
- Approximately 600(L)mm

Clip Charger Lead Used for battery charging applications and powering electronic devices connected to a power source. • 16AWG silicone wire Approximately 300(L)mm

Cat.

WC-6016

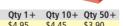


\$4.95

4mm Banana Plug to Alligator







JR Transmitter Charger Lead with Alligator Clips Charger lead with alligator clips.

Suitable for use with DC power supplies and charging other DC electronic devices



· Approximately 600(L) mm

7	Cat.	Qty 1+	Qty 10+	Qty 50+
	WC-6014	\$3.95	\$3.45	\$3.15

131

2mm Male and Female Gold **Connector Charger Lead**

Supplied with one red and one black quick connect 2mm wire set. Ideally used in battery packs or any other applications where good connection is required but can be easily and quickly removed.



- 1 x 2mm female gold connector, 20AWG silicone wire • 1 x 2mm male gold connector, 20AWG silicone wire
- Both approximately 100(L)mm each
- 7 Cat. Qty 1+

Qty 10+ Qty 50+ WC-6018 \$4.95 \$4.45 \$3.90

STOP PRESS STOP

Qty 10+ Qty 50+

\$3.90

\$4.45

Banana plugs & sockets originally started life on test equipment. Their versatility quickly saw them as output connectors for power supplies. When they were integrated with binding posts they quickly saw use as speaker connectors. Now they are everywhere.

Banana Plugs

PLUGS - PIGGY BACK

With this quality piggy back style, another banana plug can be inserted into the back of the plug.



PIGGY BACK		Qty 1+	Qty 10+	Qty 50+
Red	PP-0390	\$1.95	\$1.75	\$1.55
Black	PP-0391	\$1.95	\$1.75	\$1.55
Green	PP-0381	\$1.95	\$1.75	\$1.55
Blue	PP-0382	\$1.95	\$1.75	\$1.55
Orange	PP-0383	\$1.95	\$1.75	\$1.55

Piggy back insulating shroud type. Works with our PS-0420-24 series



PIGGY BACK		Qty 1+	Qty 10+	Qty 50+
Red	PP-0385	\$2.45	\$2.15	\$1.95
Black	PP-0386	\$2.45	\$2.15	\$1.95
Green	PP-0387	\$2.45	\$2.15	\$1.95
Blue	PP-0388	\$2.45	\$2.15	\$1.95
Orange	PP-0389	\$2.45	\$2.15	\$1.95

PLUGS





4mm		Qty 1+	Qty 10+	Qty 50+
Red	PP-0400	\$0.95	\$0.85	\$0.75
Black	PP-0402	\$0.95	\$0.85	\$0.75
RIGHT ANGLE				
Red	PP-0394	\$2.25	\$1.95	\$1.80
Black	PP-0395	\$2.25	\$1.95	\$1.80

PLUGS - METAL GOLD PLATED

Designed for monster type speaker cable.

- locking action.



PLUGS - METAL GOLD PLATED & LOCKING

These lock into the socket, and cannot be



		Qty 1+	Qty 10+	Qty 50+
Red	PP-0426	\$4.95	\$4.45	\$3.90
Black	PP-0427	\$4.95	\$4.45	\$3.90
LOCKING				
Red	PP-0416	\$7.95	\$6.95	\$6.25
Black	PP-0417	\$7.95	\$6.95	\$6.25

Banana Chassis Sockets



4mm		Qty 1+	Qty 10+	Qty 50+
Red	PS-0406	\$0.65	\$0.57	\$0.50
Black	PS-0408	\$0.65	\$0.57	\$0.50

FULLY INSULATED

Works with our PP-0385-89 series



FULLY INSULATED		Qty 1+	Qty 10+	Qty 50+
Red	PS-0420	\$2.25	\$1.95	\$1.80
Black	PS-0421	\$2.25	\$1.95	\$1.80
Green	PS-0422	\$2.25	\$1.95	\$1.80
Blue	PS-0423	\$2.25	\$1.95	\$1.80
Yellow	PS-0424	\$2.25	\$1.95	\$1.80

Includes a plastic cover to reduce the risk of shorting. Grub screws for internal wire connection. Hole size is 12mm. Cable hole 5mm dia. Available in red or black. · Gold plated



FULLY INSU	LATED GOLD	Qty 1+	Qty 10+	Qty 50+
Red	PP-0436	\$5.95	\$5.25	\$4.75
Black	PP-0437	\$5.95	\$5.25	\$4.75

4 WAY BANANA PLUG/SOCKET ASSEMBLY

4 male and 4 female banana plugs. Plugs are labelle

+, -, -, + to ide correct polarity.Gold plated

elled dentify y.	W.		
	Qty 1+	Qty 10+	Qty 50+
PP-0440	\$17.95	\$15.95	\$14.35

4mm Banana Socket to Alligator Clip

Available in black or red



			Qty 1+	Qty 10+	Qty 50+
Re	ed	PA-3668	\$2.75	\$2.45	\$2.15
Bl	ack	PA-3669	\$2.75	\$2.45	\$2.15

BANANA SOCKET WALLPLATES

· Standard power point size.

4 Way Red & black 0 00 00 2 Way

SOCKET		Qty 1+	Qty 2+	Qty 5+
2 Way	PS-0412	\$6.95	\$6.25	\$5.50
4 Way	PS-0414	\$8.95	\$7.95	\$6.95

BANANA SOCKET / BINDING POST WALLPLATES

· Standard power point size.

SOCKET / BINDING POST 8 Way

Gold plated



PT-0474



Binding Posts

STANDARD

Incorporates a banana socket.





PREMIUM

Super quality with metal thread.





 Insulated cable entry. · Post spacing 19mm.



STANDARD		Qty 1+	Qty 10+	Qty 50+
Blue	PT-0450	\$1.65	\$1.45	\$1.30
Yellow	PT-0451	\$1.65	\$1.45	\$1.30
White	PT-0452	\$1.65	\$1.45	\$1.30
Red	PT-0453	\$1.65	\$1.45	\$1.30
Black	PT-0454	\$1.65	\$1.45	\$1.30
Green	PT-0455	\$1.65	\$1.45	\$1.30
PREMIUM				
Red	PT-0460	\$1.95	\$1.75	\$1.55
Black	PT-0461	\$1.95	\$1.75	\$1.55
Green	PT-0462	\$1.95	\$1.75	\$1.55
DUAL				
	PT-0457	\$6.95	\$6.25	\$5.50

BANANA SOCKETS / BINDING POSTS -

METAL

Δ

Will accept a banana plug in the end and monster type cable or banana plug in the side. Designed for mounting on the back of amplifiers as mounting thread is only 6mm long

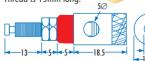




AMPLIFIER MOUNT		Qty 1+	Qty 10+	Qty 50+
Red	PT-0430	\$4.95	\$4.45	\$3.90
Black	PT-0431	\$4.95	\$4.45	\$3.90

SPEAKER BOX MOUNT

These have a hole entry on the side which will accept monster type speaker cable or a banana plug. Thread is 19mm long.



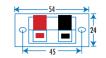
SPEAKER BO	X MOUNT	Qty 1+	Qty 10+	Qty 50+
Red	PP-0434	\$4.95	\$4.45	\$3.90
Black	PP-0435	\$4.95	\$4.45	\$3.90

\$22.35 \$19.70

SPEAKER PUSH/SCREW TERMINALS

Up to 16AWG cable.

- · Mounting holes 45mm apart
- Dimensions: 54(L) x 24(W)mm





LARGE ROUND SPEAKER TERMINAL

Up to 16 AWG cable.





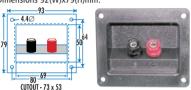
2 WAY ROUND

Qty 1+ Qty 10+ PT-3004 \$2.95 \$2.60 \$2.30

SPEAKER BOX TERMINAL

Ideal if you are running large size speaker cable to your

• Dimensions 92(W)x79(H)mm.



SPEAKER BUX	
	PT-3006

DUNELTORS

2 WAY GOLD TERMINALS ON A PLATE Top quality speaker terminal.

· Plate size 99 x 99mm.

- Hole cutout is round diameter 76mm.





\$6.25

Qty 10+

\$5.50

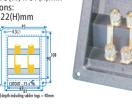
2 WAY GOLD / PLATE	Qty 1+	Qty 5+	Qty 10+
PT-3012	2 \$11.95	\$10.70	\$9.50

DOUBLE GOLD BANANA / SCREW TERMINALS

4 banana/screw terminals, 2 for positive and 2 for negative. The two like terminals are connected by a metal strap, which can be removed if you wish to run bi-wiring or passive bi-amping or electronic crossovers. You can also loop from one box to the other.

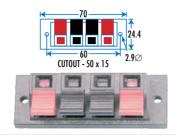
- Banana sockets have a 6mm hole to accept Monster type
- Cutout: 73(W) x 97(H)mm Dimensions





			Qty 10+
PT-3010	\$16.95	\$14.95	\$13.35

4 WAY - UP TO 16AWG



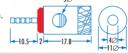
2 WAY		Qty 1+	Qty 5+	Qty 10+
	PT-3000	\$1.75	\$1.55	\$1.40
4 WAY				
	PT-3002	\$2.95	\$2.60	\$2.30

JUMBO SPEAKER CABLE TERMINALS

Can't fit your large speaker cable into your speaker box spring terminals? Problem solved!! Simply terminate the thick cable into these gold connectors and the 1.5mm dia. pin easily fits into speaker rear terminals.

• Cable entry is 6mm.

· Gold plated



		Qty 1+	Qty 5+	Qty 10+	
Red	PT-3020	\$2.65	\$2.30	\$2.07	
Black	PT-3021	\$2.65	\$2.30	\$2.07	

BANANA / SCREW TYPE

2 Way Gold Terminals

Top quality speaker terminal with gold banana sockets which also have a huge hole (6mm) to accept Monster type speaker cable.

- Supplied with gasket.
 Dimensions: 54(W) x 24(H)mm.



2 WAY GOLD		Qty 1+	Qty 5+	Qty 10+
	PT-3008	\$9.95	\$8.75	\$7.75

VALVE SOCKETS

9 PIN & 8 PIN

This unit is moulded from high grade thermo setting resin. The pins are adequately plated and have deep solder terminals, sufficient for several hard wiring points per pin. Sturdy flange mount for fitting above or below



Pins	Cat.	Qty 1+	Qty 10+	Qty 50+
9	PS-2082	\$5.95	\$5.25	\$4.75
8	PS-2080	\$6.95	\$6.25	\$5.50

MICROPHONE SERIES

Microphone plugs and sockets did indeed start off as connectors for microphones. during & after WWII in the 20th century. The fact that they can be screw locked together made them useful for other things as well. Today they are commonly used for DC connection from a front panel. The contacts are reliable up to 10A.

MICROPHONE LINE FEMALE

- · Solid metal machined body
- Nickel platedAlso suitable for secure, low voltage DC
- connection 10A max 32VDC







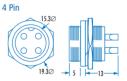


		Qty 1+	Qty 10+	Qty 50+
2 PIN	PS-2014	\$2.95	\$2.60	\$2.30
4 PIN	PS-2012	\$2.95	\$2.60	\$2.30
5 PIN	PS-2018	\$3.45	\$3.05	\$2.75

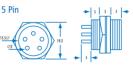
MICROPHONE CHASSIS MALE

- Solid metal machined body Nickel plated
- 10A max 32VDC
- 2 Pin











		Qty 1+	Qty 10+	Qty 50+
2 PIN	PP-2013	\$2.95	\$2.60	\$2.30
4 PIN	PP-2010	\$2.95	\$2.60	\$2.30
5 PIN	PP-2017	\$3.45	\$3.05	\$2.75

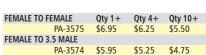
TOSLINK ADAPTORS

TOSLINK ADAPTOR FEMALE / FEMALE

 Enables shorter optical leads to be extended



TOSLINK FEMALE TO OPTICAL 3.5mm MALE



Connectors - Speakon & Amphenol

"SPEAKON" LOUDSPEAKER



NEUTRIK Heavy duty, fail-safe speaker connectors

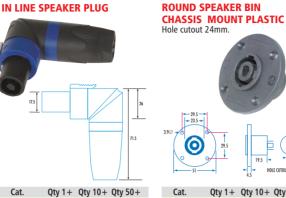
- Locking ring 30 amp continuous current Solderless termination
- The standard in high power PA speaker connections

IN LINE SPEAKER CONNECTOR 4 POLE





PP-1091 \$19.95 \$17.70 \$15.70









Cat. Qty 1+ Qty 10+ Qty 50+ PS-1094 \$11.95 \$10.70 \$9.50

Qty 1+ Qty 10+ Qty 50+ Cat. PS-1092 \$11.95 \$10.70 \$9.50

PP-1090 \$14.95 \$13.35 \$11.70 **AUDIO - ECONOMY RANGE**

Qty 1+ Qty 10+ Qty 50+

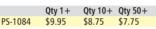




	Qty 1+	Qty 10+	Qty 50+
PP-1080	\$12.95	\$11.35	\$10.35

ROUND SPEAKER BIN SOCKET







Qty 10+ Qty 50+ \$8.75 \$7.75 PS-1082

Speakon Lead Extender

Connects Speakon leads together to extend cable runs as far as you need to.

• ABS construction.



7	Qty 1+	Qty 10+	Qty 50+
PA-3689	\$12.95	\$11.35	\$10.35

Speakon Audio Leads

Speakon connectors are the standard for speaker conections in PA and sound reinforcement applications, and if you're building or installing a system they're the only way to go. You could buy the cable and connectors and put them together, or buy these excellent ready-made cable assemblies. Available in lengths up to 20m for every application

7		Qty 1+	Qty 4+	Qty 10+
5 metre	WA-7100	\$29.95	\$26.90	\$23.70
10 metre	WA-7102	\$49.95	\$44.90	\$39.90
15 metre	WA-7104	\$69.95	\$62.95	\$55.95
20 metre	WA-7106	\$99.00	\$88.95	\$78.95

Amphenol

Amphenol



XLR - AMPHENOL

Typically used for balanced connections such as professional microphones; these connectors are 3 pin and lock on to the socket. The confusion over whether pin 2 or 3 is hot has only relatively recently been resolved. The Standard has been defined by the Audio Engineering Society which we have outlined on the bottom of page 184.

Amphenol have taken over the genuine Cannon brand.

LINE - 3 PIN

· Solder type

Male

Female

Amphenol

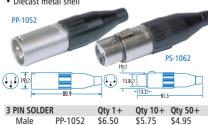
\$5.75

\$6.95

\$4.95

\$6.25

Diecast metal shell



\$6.50

\$7.95

LINE - 4 PIN

Cannon/Amphenol Silver

Diecast metal shell

 Nickel plated PP-1040 PS-1042

4 PIN		Qty 1+	Qty 10+	Qty 50+
Male	PP-1040	\$11.95	\$10.70	\$9.50
Female	PS-1042	\$15.95	\$14.35	\$12.70

LINE - 3 PIN IDC

Diecast metal shell

Insulation displacement (solderless)



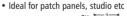
3 PIN SOLDE	RLESS	Qty 1+	Qty 10+	Qty 50+
Male	PP-1056	\$7.95	\$6.95	\$6.25
Female	PS-1066	\$9.95	\$8.75	\$7.75

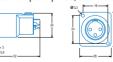
CHASSIS MOUNT D-SERIES XLR SOCKETS High quality Amphenol brand XLR 3 pole chassis mount

sockets. Can be front or rear mounted in P or D series

- panels.
 24mm hole cut-out
- D series flangeStamped phosphor
- Bronze contacts
- Nickel finish
- Max Wire Gauge: 14AWG • Flammability Rating: UL94-V0
- Current Carrying Capacity: 15A
- RoHS Compliant

MALE



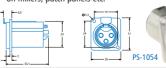






Amphenol

FEMALE Ideal for balanced microphone inputs on mixers, patch panels etc.



331	
Qty 1+ Qty 10+ Q	ty 50+
Male PP-1058 \$6.95 \$6.25 \$!	5.50
Female PS-1054 \$7.95 \$6.95 \$6	6.25

DUNELTORS

CANNON / XLR TYPE SCANAR 3 Pin Line **BLACK**



RIGHT ANGLE - BLACK

Diecast metal shell



Combo XLR / 6.35mm Stereo Socket Switched

Combined 3 pole XLR & 6.35mm stereo jack for balanced microphone or line. It will accept 6.35mm mono, 6.35mm stereo or 3-pin male XLR.

- Suits D-series panel cut-outs.
- Non-locking.Panel or PCB mounting
- Switched Independent inputs
- Gold pla

ated contacts	•			
	Qty 1+	Qty 10+	Qty 50+	
PS-1069	\$9.95	\$8.75	\$7.75	

3 pin Chassis - Plastic

Hole cutout 22mm.

 Black ABS plastic body **MALE**

FEMALE





SCANAR

PP-1010

PP-1016

PLASTIC		Qty 1+	Qty 10+	Qty 50+
Male	PP-1016	\$3.95	\$3.45	\$3.15
PLASTIC				
Female	PS-1018	\$3.95	\$3.45	\$3.15
0 Dia OI	!-	Matal		

3 Pin Chassis - Metal

Hole cutout 20mm. Black.

· Diecast body

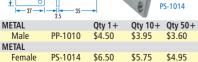
MALE

Hole cutout 20mm









Chassis Metal

- Small size
- Hole cutout 24mm
- · Diecast body Nickel plated

3 PIN MALE



3 PIN FEMALE



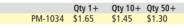
SCANAR

PP-1023

SMALL SIZE	Metal	Qty 1+	Qty 10+	Qty 50+
Male	PP-1023	\$5.95	\$5.25	\$4.75
Female	PS-1024	\$6.95	\$6.25	\$5.50

Rubber XLR Cover Boot

This cover will mean you can effectively operate a PA or sound system outdoors in inclement weather without undue damage. This flexible boot slips over the entire XLR - XLR connection to keep water and dust out. Even if you aren't planning to use your system in the rain, they're still indispensable for protecting permanent connections from damage and dust. 120mm long.



SCANAR

XLR Adaptors

3 PIN ADAPTORS



Male	PA-3684	\$12.95	\$11.35	\$10.35
Female	PA-3686	\$14.95	\$13.35	\$11.70

3 PIN CANNON TYPE SOCKET TO 6.5MM PLUG ADAPTOR

These are high quality, all metal construction adaptors suitable for stage or studio use. They're ideal for converting microphone cannon leads to 6.5mm plugs ready for 4- track recorders or any other audio equipment with 6.5mm sockets



		Qty I+	QLY IU+	QLY DU +
Male	PA-3682	\$12.95	\$11.35	\$10.35
Female	PA-3680	\$8.95	\$7.95	\$6.95

XLR TO RCA ADAPTOR



Ì			Qty 1+	Qty 10+	Qty 50+
	Male	PA-3800	\$9.95	\$8.75	\$7.75
	Female	PA-3802	\$12.95	\$11.35	\$10.35

MINI XLR

3. 4 Pin Line

Diecast bodyNickel plated



3 PIN		Qty 1+	Qty 10+	Qty 50+
Male	PP-1910	\$5.95	\$5.25	\$4.75
3 PIN				
Female	PS-1924	\$6.95	\$6.25	\$5.50

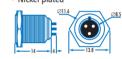


4 PIN		Qty 1+	Qty 10+	Qty 50+	
Male	PP-1912	\$6.95	\$6.25	\$5.50	
4 PIN					
Female	PS-1926	\$6.95	\$6.25	\$5.50	

3, 4 Pin Chassis

3 PIN MALE

Diecast body Nickel plated

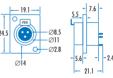


CANAR

SCANAR

3 PIN FEMALE

Cut out 15mm.



0	
3	

3	PIN		Qty 1+	Qty 10+	Qty 50+	
	Male	PP-1916	\$7.95	\$6.95	\$6.25	
3	PIN					
	Female	PS-1930	\$9.95	\$8.75	\$7.75	

4 PIN FEMALE

Cut out 15mm







4 PIN		Qty 1+	Qty 10+	Qty 50+
Male	PP-1918	\$7.95	\$6.95	\$6.25
4 PIN				
Female	PS-1932	\$9.95	\$8.75	\$7.75

XLR WIRING

The Standard is defined by the Audio Engineering Society in AES14-1992(r1998)





Pin 1: Shield / Ground Pin 2: Hot / in Phase / +

Pin 3: Cold / Out of Phase / -



To create an unbalanced connection, pin 1 & pin 3 are connected to ground & pin 2 carries the signal.

It should be noted that there is a lot of equipment (oparticularly in the US) that has pin 2 and pin 3 designations reversed (i.e. 3 hot, 2 cold). Manufacturers are adopting the Standard on all new equipment.

T

Connectors - Wallplates & DIN

WALLPLATES STAINLESS STEEL

No matter what audio installation you're contemplating, you're sure to find a wallplate to give your room that pro look. Finished in attractive stainless steel, these cost-effective wallplates have all the popular audio connectors, or use a blank to customise your own. Ideal for Hi-Fi installations, home studios, home theatre or just a neat solution to running an AV extension to another room.

Blank Wallplate

Stainless steel blank wallplate



7	Cat.	Qty 1+	Qty 2+	Qty 5+
Blank	PS-0550	\$3.95	\$3.45	\$3.15

6.5mm Socket - Locking

Stainless steel wallplates with single or double 6.5mm (1/4") locking socket(s).





7	Cat.	Qty 1+	Qty 2+	Qty 5+
Single 1/4"	PS-0557	\$6.95	\$6.25	\$5.50
Double 1/4"	PS-0558	\$9.95	\$8.75	\$7.75

XLR - Blank & Loaded

Pre-punched blanks for XLR sockets Sockets not included Single: PS-0551 Double: PS-0552





7	Cat.	Qty 1+	Qty 2+	Qty 5+
Single Blank	PS-0551	\$4.50	\$3.95	\$3.60
Double Blank	PS-0552	\$4.95	\$4.45	\$3.90

4 Pole Speakon Socket

Single 4 pole Speakon socket Cat. PS-0559

Double 4 pole Speakon socket Cat. PS-0560





XLR Sockets

Pre-punched wallplate with loaded XLR socket(s)

Single 3P female XLR socket Cat. PS-0553

Double 3P Female XLR socket Cat. PS-0554

Single 3P Male XLR socket Cat. PS-0555

Double 3P Male XLR socket Cat. PS-0556

7 Si D Si

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Want more wallplates

see page 234

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	.O°	
ty 2+	Qty 5+	
C 2 E	ΦΕ ΕΛ	

			Qty 1+	Qty 2+	Qty 5+
ingle	XLR	PS-0553	\$6.95	\$6.25	\$5.50
ouble	XLR	PS-0554	\$9.95	\$8.75	\$7.75
ingle	XLR	PS-0555	\$6.95	\$6.25	\$5.50
ouble	XLR	PS-0556	\$9.95	\$8.75	\$7.75

Otv 1+ Qty 2+ Otv 5+ PS-0559 \$6.95 Single \$6.25 \$5.50 PS-0560 \$9.95 Double

Rubber Cover for XLR Socket

Rubber Cover for Male XLR Socket Cat. PS-0561

Plastic Cover for Female XLR Socket Cat. PS-0562

(h) HIRSCHMANN

6 POLE

Type



7	7		Qty 1+	Qty 10+	Qty 50+	
	Suit Male	PS-0561	\$0.50	\$0.45	\$0.40	
	Suit Female	PS-0562	\$1.00	\$0.90	\$0.80	

HARSH ENVIRONMENT

LTW IP67 Harsh **Environment** Circular Connectors



PS-0543

Perfect for harsh environments such as marine, industrial, outdoor, automotive, etc.

- IP67 rated
- Locking bayonet connection
- Gold plated
- III rated
- Wide temperature: -40°C to 105
- Solder pins
- 2pin versions rated to 5A



	-	100	2
	PP-0546	PS-0547	
2 Pin Line Socket	Qty 1+	Qty 10+	Qty 50+
PS-054	1 \$10.95	\$9.75	\$8.75
2 Pin Panel Mount I	Plug		
PP-054	2 \$8.95	\$7.95	\$6.95
4 Pin Line Socket			
PS-054	3 \$12.95	\$11.35	\$10.35
4 Pin Panel Mount I	Plug		
PP-054	4 \$10.95	\$9.75	\$8.75
6 Pin Line Socket			
PS-054	5 \$14.95	\$13.35	\$11.70
6 Pin Panel Mount I	Plug		
PP-054	6 \$12.95	\$11.35	\$10.35
Dust Cap to Suit			
PS-054	7 \$6.95	\$6.25	\$5.50

DIN

Originally a German standard, these connectors are available in versions from 2 to 13 pins. Once widely used, these are now seen less on AV equipment. The 2 pin version is used for some loudspeakers and 5 pin version is still used for connecting MIDI electronic musical instruments and older PC keyboards.

Line DIN Plugs

2, 3 PIN PLUGS

Nickel plated





5 PIN PLUGS



6. 7. 8 PIN PLUGS



		_		
2 PIN		Qty 1+	Qty 10+	Qty 50+
	PP-0300	\$0.65	\$0.57	\$0.50
3 PIN				
	PP-0302	\$0.95	\$0.85	\$0.75
5 PIN				
	PP-0304	\$1.00	\$0.90	\$0.80
5 PIN 240°				
	PP-0305	\$1.25	\$1.10	\$0.97
5 PIN PREMIU	IM DIE CAST			
	PP-0306	\$3.75	\$3.30	\$2.95
6 PIN				
	PP-0308	\$1.45	\$1.30	\$1.15
7 PIN				
	PP-0310	\$1.65	\$1.45	\$1.30
8 PIN				
	PP-0312	\$1.85	\$1.65	\$1.45

HARSH ENVIRONMENT

IP67 Rated Multiple Pole Harsh Environment Connectors

C16-1 series connectors offer 3 or 6 pole with pre-engaging earth contact. The mating parts screw together securely to provide environmental protection to IP67.

Specifications	3 Pole + PE	6 Pole + PE
Current rating	16A	10A
Voltage rating	380VAC 450VDC	380VAC 450VDC
Insulation resistance	>10Gohms	>10Gohms
Contact resistance	<5mohms	<5mohms
Max wire size	2.5mm ²	0.75mm ²

Environmental	
Temperature range	-40°C to +100°C
Protection	IP67 to IEC60529/ DIN40050
Housing	Polyamide 66 Nylon
Strain relief	Screw clamp & Gland Nut



PE Chassis Skt







\$11.35

Otv 10+ PE Line Plug \$15.95 PP-1006 \$17.95 PE Line Skt PS-1007 \$17.95 \$15.95 \$14.3 PE Chassis Plug PP-1008 \$12.95 \$11.35 \$10.3

PS-1009 \$12.95



RICE	PE Line Plug	PP-1000	\$19.95	\$17.70	\$15.70
RICE	PE Line Skt	PS-1001	\$19.95	\$17.70	\$15.70
	PE Chassis Plug	PP-1002	\$13.95	\$12.35	\$10.95
Qty 50+	PE Chassis Skt	PS-1003	\$13.95	\$12.35	\$10.95
\$14.35					
\$14.35	Туре		Qty 1+	Qty 10+	Qty 50+
\$10.35	Plug Dust Cap	PP-1004	\$9.95	\$8.75	\$7.75
\$10.35	Skt Dust	PS-1005	\$9.95	\$8.75	\$7.75

PP-1004

Qty 1+ Qty 10+ Qty 50+

DIN (CONTINUED)

LINE SOCKETS - 5, 6, 8 PIN



		Qty 1+	Qty 10+	Qty 50+
5 PIN	PS-0352	\$1.85	\$1.65	\$1.45
6 PIN	PS-0355	\$2.45	\$2.15	\$1.95
8 PIN	PS-0358	\$2.95	\$2.60	\$2.30

MINI DIN



NICKEL PLATED		Qty 1+	Qty 10+	Qty 50+		
	PP-0362	\$3.95	\$3.45	\$3.15		
		Qty 1+	Qty 10+	Qty 50+		
	PP-0364	\$1.75	\$1.55	\$1.40		
GOLD PLATED - 6mm						
	PP-0365	\$5.95	\$5.25	\$4.75		

\$1.95

\$1.95

Qty 10+ Qty 50+

Qty 10+ Qty 50+

\$1.55

\$1.55

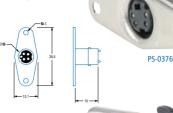
\$1.75

\$1.75

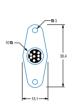
MINI DIN / S-VIDEO

4, 6, 8 PIN PANEL SOCKETS Cutout 10mm.

Nickel plated







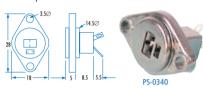


		Qty 1+	Qty 10+	Qty 50+
4 PIN	PS-0376	\$2.75	\$2.45	\$2.15
6 PIN	PS-0377	\$2.75	\$2.45	\$2.15
8 PIN	PS-0378	\$2.95	\$2.60	\$2.30

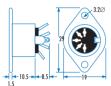
Mini DIN / S-Video Adaptors

2, 5, 6, 8 PIN PANEL SOCKETS

Nickel plated



Hole cutout 15mm.



Hole cutout 15mm.



PS-0348

4, 6, 8 PIN LINE SOCKETS

NICKEL PLATED

NICKEL PLATED

6 PIN MINI DIN PLUG

8 PIN MINI DIN PLUG Suits Macintosh computers

PP-0366

PP-0370



		Qty 1+	Qty 10+	Qty 50+
4 PIN	PS-0372	\$1.95	\$1.75	\$1.55
6 PIN	PS-0368	\$2.25	\$1.95	\$1.80
8 PIN	PS-0374	\$2.95	\$2.60	\$2.30

M8 CIRCULAR

Commonly used in process control instrumentation. All connectors are field installable.



F	PP-4300		PS-43U1	
PLUGS		Qty 1+	Qty 10+	Qty 50+
3 Way	PP-4300	\$19.95	\$17.70	\$15.70
4 Way	PP-4302	\$24.95	\$22.35	\$19.70
SOCKETS				
3 Way	PS-4301	\$26.95	\$23.95	\$21.35
4 Way	PS-4303	\$29.95	\$26.90	\$23.70

4 core colour coded, suitable for industrial sensor wiring.

Roll length 100m

M8 Circular Connector Cable

4 x 0.34mm sq, 7mm PVC sheath.

Sheath: Black PUR, V90 flame retardant. Conductor: Plain copper wire Roll

Specifications:

Insulation: V75

& RCA sockets.

S-VIDEO FEMALE TO RCA MALE VIDEO

• Gold plated S-Video

S-VIDEO TO RCA VIDEO

Dub S-Video video signals to RCA equipped machines.

S-VIDEO PLUG TO RCA VIDEO SOCKET · Gold plated male S-Video and

RCA socket.

Dub S-VHS video signals to RCA equipped machines.

• Gold plated S-Video socket & RCA plug.



Gold plated



PA-3577

PA-3578

PA-3579

PA-3573

PA-0878

Tellia	ie to ieiliaie auaptoi.	
• Ena	ables shorter mini DIN	ı

leads to be extended

	Qty 1	+ Qty 4	+ Qty 10+
PA-3!	577 \$8.95	5 \$7.95	\$6.95
PA-3!	578 \$7.95	\$6.95	\$6.25
PA-3!	579 \$8.95	5 \$7.95	\$6.95
PA-3!	573 \$9.95	\$8.75	\$7.75
PA-08	378 \$7.95	\$6.95	\$6.25

Hole cutout 15mm.



ONDECTORS



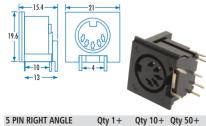


PS-0354

PS-0359

		Qty 1+	Qty 10+	Qty 50+
2 PIN	PS-0340	\$1.45	\$1.30	\$1.15
5 PIN	PS-0348	\$1.65	\$1.45	\$1.30
6 PIN	PS-0354	\$1.95	\$1.75	\$1.55
8 PIN	PS-0359	\$2.95	\$2.60	\$2.30

5 PIN RIGHT ANGLE PCB SOCKET



\$1.95



\$1.75 \$1.55

Freecall order hotline: 1800 022 888

CABLE TO SUIT	Per metre 1+Rolls	5+Rolls
WB-2050	\$6.50 \$530.00	\$445.00

PS-0350

SCART

Carries stereo audio, composite video, S-video & RGB. Used to carry signals from AV source to your TV and also allow recording to other sources, for example video recorders. Originated in Europe.

21 PIN PLUG



	Ųly I⊤	Qty IU⊤	Qty Ju⊤
PP-0580	\$4.95	\$4.45	\$3.90

SCART PLUG TO RGB ADAPTOR



SCART PLUG TO 3 RCA & S-VIDEO SOCKETS

An excellent adaptor that converts from male Scart to female RCA and S-Video Switchable - in or out.

PA-3659

SCART ADAPTOR

- Female to female
- Enables shorter SCART leads to be extended



SCART TO RO	iB	Qty 1+	Qty 4+	Qty 10+	
	PA-3667	\$14.95	\$13.35	\$11.70	
SCART TO R	CA / S-VIDEO)			
	PA-3659	\$14.95	\$13.35	\$11.70	
SCART ADAPTOR					
	PA-3650	\$5.95	\$5.25	\$4.75	

HDMI

HDMI SOCKET TO SOCKET

HDMI Socket to Socket Gender IC Adaptor



HDMI PLUG TO DVI-D

HDMI plug to DVI-D socket adaptor



HDMI SOCKET TO DVI-D PLUG ADAPTOR

Connect a computer DVI-D output directly to a TV or projector with this simple converter. Plug the converter into the DVI-D port on a

computer and connect a HDMI cable to the TV or projector. Can also function in reverse to connect HDMI cables to a display with a HDCP compatible DVI-D port. HDMI cable not included.



MINI HDMI PLUG TO HDMI **SOCKET ADAPTOR**

Ideal for camcorders or other devices utilising the mini HDMI standard socket.



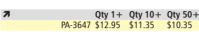
HDMI SOCKET TO SKT	Qty 1+	Qty 10+	Qty 50+
PA-3640	\$16.95	\$14.95	\$13.35
HDMI PLUG TO DVI-D			
PA-3642	\$16.95	\$14.95	\$13.35
HDMI SKT TO DVI-D			
PA-3644	\$16.95	\$14.95	\$13.35
MINI HDMI PLUG TO SKT			
PA-3645	\$9.95	\$8.75	\$7.75

HDMI

HDMI Plug to HDMI Socket Swivel Adaptor

Connect HDMI cables where space is an issue such as wall mounted TV's with this adaptor which swivels up to 180°.

· Gold plated connectors



Micro HDMI Plug to **HDMI Socket Adaptor**

Connects your Smart phone, camera or other device with micro HDMI socket to any TV with a HDMI connection.

- Colour: Black
- Gold plated connectors

7		Qty 1+	Qty 10+	Qty 50+
	PA-3649	\$9.95	\$8.75	\$7.75

COAXIAL - PAL

These are the standard aerial connectors for TVs and video recorders. They are often called "Belling-Lee" or "PAL" connectors.

75 Ohm Line Plugs

PLASTIC

PP-0600

NICKEL PLATED

PP-0602

GOLD PLATED

Best quality plug. Solderless

8mm cable dia

PP-0604

R/A SOLDERLESS

PP-0606

CRIMP RG59

PP-0607

CRIMP RG6

PP-0608

JOINER



75 Ohm Line Sockets

PLASTIC

PS-0610

NICKEL PLATED

PS-0614

RIGHT ANGLE **SOLDERLESS**

CRIMP RG59

CRIMP RG6

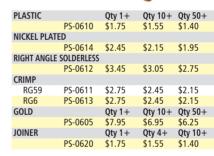
PS-0613

JOINER

PS-0620

GOLD

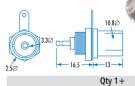
PS-0605

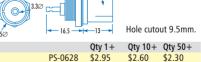


75 Ohm Chassis Socket

75 OHM CHASSIS MOUNT SOCKET

- · Nickel plated
- · High quality product





75 Ohm Joiner

COAY CARLE TOINER Hardwire connection of 50 to 75Ω coax cable.



COAXIAL - ADAPTORS PAL PLUG TO RCA SOCKET PΔ-3675 **PAL SOCKET TO** PAL SOCKET PS-0620 **PAL PLUG TO PAL PLUG PAL PLUG TO** PAL SOCKET PA-367 **RIGHT ANGLE**

PA-3653

PA-3671

PA-3674



F SOCKET TO

PAL SOCKET













7		Qty 1+	Qty 4+	Qty 10+
	PA-3675	\$3.95	\$3.45	\$3.15
	PS-0620	\$1.75	\$1.55	\$1.40
	PS-0622	\$1.75	\$1.55	\$1.40
	PA-3679	\$4.95	\$4.45	\$3.90
	PA-3656	\$3.95	\$3.45	\$3.15
	PA-3653	\$3.95	\$3.45	\$3.15
	PA-3673	\$4.95	\$4.45	\$3.90
	PA-3672	\$1.95	\$1.75	\$1.55
	PA-3671	\$2.95	\$2.60	\$2.30
	PA-3674	\$3.95	\$3.45	\$3.15
	PA-0633	\$1.65	\$1.45	\$1.30

COAXIAL - F TYPE

Used mainly for RF signals such as those for satellite dishes, cable boxes or TV aerials. The highest quality connections between your cable/satellite wallplate output and the cable/satellite box. Standard emerged from the US cable TV industry. Now the Aust./NZ standard.

F Type Plugs

F connectors recommended for all new TV installations

PP-0640

SUITS RG59 This plug comes with a

crimping ring for RG59

- Fits our WB-2002 & WB-2004.
- Ideal for pro and weekend installers.
- · Nickel plated

SUITS RG6

With a crimping ring for RG6 coax.
• Fits our (Belden)

- WB-2008 & WB-2009.
- See tool section for crimpers (TH-1950/56 or TH-1878)
- Nickel plated

PP-0641



See pages 141 for Crimping Tools & page 204 for Coaxial Cable

F-59 CRIMP PLUG FOR RG59U

With integral crimp ring Nickel plated





F-59 CRIMP PLUG FOR RG6

With integral crimp ring. Nickel plated





F-59 CRIMP PLUG FOR RG59

As used by TV installers, heavy gauge with a passivated brass coloured zinc finish



F-59 CRIMP CONNECTOR **FOR RG6 CABLE**

As used by cable TV installers, heavy gauge with a passivated



F-59 WATERPROOF **COMPRESSION PLUG FOR RG6 CABLE**

F-59 line plug for RG6 quad shield cable. Waterproof with dual crimp points for the cable and dual O-rings on the thread. Foxtel approved Crimp tool to suit: TH-1803.



PP-	07	0

SUITS RG59	or RG6 CABLE	Qty 1+	Qty 10+	Qty 50+
Each	PP-0640	\$0.95	\$0.85	\$0.75
Each	PP-0702	\$1.95	\$1.75	\$1.55
Each	PP-0643	\$1.25	\$1.10	\$0.97
Each	PP-0641	\$0.95	\$0.85	\$0.75
Each	PP-0644	\$1.25	\$1.10	\$0.97
100 Pk	PP-0703	\$59.95	\$53.95	\$47.90
Each	PP-0704	\$1.95	\$1.75	\$1.55
100 Pk	PP-0705	\$59.95	\$53.95	\$47.90
Each	PP-0708	\$1.95	\$1.75	\$1.55

F Type Twist On Plugs

These are ideal crimpless but strong F-plugs for low volume applications. Highly recommended.

F-59 TYPE

SCREW-ON PLUGS

Simply strip coax back about 12mm, fold braid/foil back over the plastic outer sheath. Trim about 8mm of foam insulation

from centre conductor. Then simply screw the knurled connector on the cable until you see sufficient centre conductor out of the front of the connector. The foam insulation will centrally locate this conductor.

Nickel plated

SUITS RG59 CABLE	Qty 1+	Qty 10+	Otv 50+
PP-0637	\$1.45		\$1.15
FF-0037	\$1.45	\$1.5U	\$1.15
SUITS RG6 CABLE			
PP-0638	\$1.45	\$1.30	\$1.15

CRIMPLESS F-TYPE PLUG TO RG6 No crimper or soldering required.



F-59 TOOL-LESS COMPRESSION **CRIMP CONNECTOR**

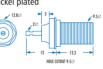
No crimping tool required. Just strip back the outer and inner sheath, fold the braid back and push the connector on. The crimp is reliable with high mechanical strength and will never come off. Suitable for RG6 quad shield coax.

7		Qty 1+	Qty 10+	Qty 50+
	PP-0677	\$2.50	\$2.21	\$1.95

F Type Sockets

F-61 CHASSIS SOCKET

Hole cutout 9.5mm. Nickel plated

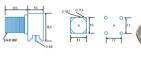




PS-0730

F-61 PCB MOUNT SOCKET

PCB mounting
 Nickel plated



7	Qty 1	+ Qty 10+	Qty 50+
	PS-0645 \$1.75	\$1.55	\$1.40
	PS-0730 \$6.95	\$6.25	\$5.50

F Type Adaptors

F-81 INLINE JOINER

· Nickel plated





7		Qty 1+	Qty 10+	Qty 50+
	PS-0646	\$1.95	\$1.75	\$1.55

F-59 TYPE 75 OHM DUMMY LOAD Simply screw on to unused

ports of splitters, etc to maintain good VSWR. Nickel plated



DUMMY LOAD	Qty 1+	Qty 10+	Qty 50+
PP-0639	\$1.50	\$1.35	\$1.20

Connectors - Coaxial BNC Type

BNC CONNECTORS

TECH TIP

BNC plugs lock on to the socket and are used for some digital audio connections as well as for video connections, particularly CCTV.

Male Line Plugs

SOLDER TYPE Nickel plated



CRIMP RG6

CRIMP RG59





SOLDER		Qty 1+	Qty 10+	Qty 50+
	PP-0650	\$3.25	\$2.90	\$2.60
CRIMP				
RG59	PP-0688	\$3.25	\$2.90	\$2.60
RG6	PP-0689	\$4.95	\$4.45	\$3.90
SOLDERLESS				
	PP-0652	\$4.95	\$4.45	\$3.90

Crimpless BNC Plug to RG6

No crimper or soldering required.

• Crimpless BNC Plug to RG6



7		Qty 1+	Qty 10+	Qty 50+
	PP-0675	\$3.50	\$3.15	\$2.75

Male Crimp Plugs

SUITS RG59

- With 0.7mm centre pin.
 Suits standard size RG59
- Nickel plated



• 0.9mm centre pin.





COMPRESSION PLUG

CRIMP PLUG BOOT Suits - PP-0695 Mini UHF plug, PS-0660 BNC female line crimp, PP-0649 BNC RG58 Crimp plug & PP-0651

BINC KG59 CII	mp plug.	•		PM-0648		
0.7mm CENTE	RE PIN	Qty 1+	Qty 10+	Qty 50+		
	PP-0647	\$2.95	\$2.60	\$2.30		
0.9mm CENTRE PIN						
	PP-0651	\$2.95	\$2.60	\$2.30		
CRIMP TYPE	CRIMP TYPE					
RG58	PP-0649	\$2.95	\$2.60	\$2.30		
RG6	PP-0657	\$3.95	\$3.45	\$3.15		
COMPRESSION CRIMP						
	PP-0669	\$3.95	\$3.45	\$3.15		
CRIMP BOOT						
	PM-0648	\$1.95	\$1.75	\$1.55		

Male Twist On Plugs MALE TWIST ON

PLUG FOR RG59 Suits our Belden coax

• 0.9mm centre. Nickel plated

MALE TWIST ON PLUG FOR RG6 Suit RG6 cable

Nickel plated

TERMINATOR PLUG

To terminate BNC sockets with a 50Ω resistor.

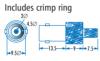
· Nickel plated



			`			
TWIST ON FOR	R RG59	Qty 1+	Qty 10+	Qty 50+		
	PP-0678	\$3.95	\$3.45	\$3.15		
TWIST ON FOR	TWIST ON FOR RG6					
	PP-0679	\$4.95	\$4.45	\$3.90		
TERMINATOR						
	PP-0655	\$4.95	\$4.45	\$3.90		

Line Sockets

CRIMP TYPE





LINE SOCKET		Qty 1+	Qty 10+	Qty 50+	
RG58	PS-0660	\$4.95	\$4.45	\$3.90	
RG6	PS-0659	\$4.95	\$4.45	\$3.90	
JOINER					
	PS-0663	\$3.95	\$3.45	\$3.15	

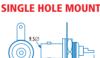
Chassis Sockets

SQUARE MOUNT

Nickel plated





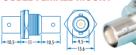






Hole cutout 9.5mm

DOUBLE FEMALE MOUNT



SQUARE MOUNT	Qty 1+	Qty 10+	Qty 50+	
PS-0656	\$2.95	\$2.60	\$2.30	
SINGLE HOLE MOUNT				
PS-0658	\$3.95	\$3.45	\$3.15	
DOUBLE FEMALE MOUNT				
PS-0662	\$4.45	\$3.95	\$3.45	

BNC PCB

PP-0649/57

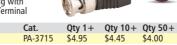
· PCB connect with optional panel screw fixing



	Qty 1+	Qty 10+	Qty 50+
PS-0661	\$7.95	\$6.95	\$6.25
 			_

BNC Plug with Spring Terminal

BNC Plug with Spring Terminal





BNC Adaptors

BNC PLUG TO F59 PLUG ADAPTOR

BNC ADAPTORS 1 Male to 2 Female.





BNC T ADAPTOR 1 Female to 2 Female.

Triple BNC female



BNC MALE TO DOUBLE BINDING POSTS/ BANANA SOCKETS

Pin separation is standard 19mm Suits DMMs, CROs, etc.



BNC PLUG TO BNC PLUG ADAPTOR



BNC PLUG TO F-81 SOCKET



BNC PLUG TO RCA SOCKET





PL259 PLUG TO BNC SOCKET





BNC PLUG TO BLUE BNC SOCKET RIGHT ANGLE



BNC TO F-59		Qty 1+	Qty 10+	Qty 50+	
	PA-3665	\$4.95	\$4.45	\$3.90	
1 MALE TO 2	FEMALE				
T Type	PA-3662	\$5.95	\$5.25	\$4.75	
1 MALE TO 2	FEMALE				
Y Type	PA-3664	\$9.95	\$8.75	\$7.75	
1 FEMALE TO	2 FEMALE				
	PA-3660	\$4.95	\$4.45	\$3.90	
BNC TO BANA	ANA				
	PA-3666	\$8.95	\$7.95	\$6.95	
BNC TO BNC					
	PA-3661	\$4.95	\$4.45	\$3.90	
BNC PLUG TO	F81 SKT				
	PA-3651	\$1.95	\$1.75	\$1.55	
BNC PLUG TO	RCA SKT				
	PA-3654	\$3.95	\$3.45	\$3.15	
PL259 TO BN	PL259 TO BNC SKT				
	PA-3652	\$6.95	\$6.25	\$5.50	
BNC PLUG SK	T - R/A				
	PA-3663	\$4.95	\$4.45	\$3.90	

N TYPE

LINE PLUG

Suits RG58U cable. Compression cord

clamp Nickel plated

LINE **SOCKET** Suits RG58U

· Nickel plated





LINE PLUG		Qty 1+	Qty 10+	Qty 50+	
	PP-0672	\$5.95	\$5.25	\$4.75	
LINE SOCKET					
	PS-0673	\$6.95	\$6.25	\$5.50	
PANEL SOCKET					
	PS-0674	\$6.95	\$6.25	\$5.50	

UHF CONNECTORS

UHF - Mini

MALE LINE PLUG

- Suits RG58U cable
- Crimp
- Nickel plated



		Qty 1+	Qty 10+	Qty 50+
RG58U	PP-0695	\$4.95	\$4.45	\$3.90
RG59	PP-0694	\$4.95	\$4.45	\$3.90

LINE PLUGS - PL259 TYPE

Solder type





CHASSIS SOCKET

Panel Socket SO239

Square Mount

Nickel plated

RG-58U CABLE	+ REDUCER	Qty 1+	Qty 10+	Qty 50+
	PP-0680	\$2.95	\$2.60	\$2.30
RG-8U CABLE				
	PP-0682	\$2.95	\$2.60	\$2.30

UHF JOINER

Double Female Joiner

Nickel plated



JOINER		Qty 1+	Qty 10+	Qty 50+
	PS-0690	\$3.95	\$3.45	\$3.15
CHASSIS SOC	KET			
	PS-0686	\$2.95	\$2.60	\$2.30

DEAN STYLE

Deans Style 60A 2 Pole Gold Plated Connector Set



These are the industry standard in high performance connectors. Rated number one by RC Car Action, the world's leading RC car racing magazine. These connectors offer considerably less resistance than their competitors and are rated at 60 amps.

· Supplied as a pair.

	Qty 1+	Qty 10+	Qty 50+
PT-4450	\$3.95	\$3.45	\$3.15

SMA CONNECTORS

SMA PLUG

Suits RG58U cable.

· Crimp style

Gold plated





SMA PILIG

Crimp typeGold plated

RIGHT ANGLE

Suits RG174 cable.

LINE PLUG		Qty 1+	Qty 10+	Qty 50+
	PP-0632	\$5.65	\$4.95	\$4.45
RIGHT ANGLE				
	DD 0621	¢5 05	¢5.25	¢175

SMA LINE SOCKET

- Gold plated



	Qty 1+	Qty 10+	Qty 50+
PS-0634	\$4.95	\$4.45	\$3.90

SMA REVERSE

LINE PLUG Suits RG174U cable Gold plated



Right angle

•	Solder	
•	Gold plated	

REVERSE LINE		Qty 1+	Qty 10+	Qty 50+
Plug	PP-0590	\$5.95	\$5.25	\$4.75
Socket	PS-0592	\$5.95	\$5.25	\$4.75
REVERSE PCB				
Plug	PP-0594	\$9.95	\$8.75	\$7.75
Socket	PS-0596	\$9.95	\$8.75	\$7.75

PA-0625

PA-0626

SMA Adaptors SMA SOCKET TO MMCX PLUG

SMA SOCKET TO



Qty 1+	Qty 10+

		_	
	Qty 1+	Qty 10+	Qty 50+
PA-0625	\$6.95	\$6.25	\$5.50
PA-0626	\$6.95	\$6.25	\$5.50

SMA SOCKET **TO REVERSE SMA PLUG**

SMA SOCKET TO REVERSE SMA SOC



CKET				
		Qty 1+	Qty 10+	Qty 50+
	PA-0627	\$6.95	\$6.25	\$5.50
	PA-0629	\$6.95	\$6.25	\$5.50

SMA Factory Precrimped Coaxial Leads

- SMA plug to plug Gold plated connectors
 RG316 high quality coax cable
 Bandwidth up to 2.9GHz



		Qty 1+	Qty 4+	Qty 10+
1m	WC-7800	\$17.95	\$15.95	\$14.35
3m	WC-7802	\$29.95	\$26.90	\$23.70
5m	WC-7804	\$39.95	\$35.90	\$31.90

SMA SOCKET TO FMF PI UG

SMA SOCKET TO BNC SOCKET

SMA PLUG TO BNC SOCKET



	Qty 1+	Qty 10+	Qty 50+
PA-0621	\$4.95	\$4.45	\$3.90
PA-0624	\$4.95	\$4.45	\$3.90
PA-0615	\$5.95	\$5.25	\$4.75

N TO SMA SOCKET

N plug to SMA socket - PA-0616



SMA COUPLER

· Gold plated



	Qty 1+	Qty 10+	Qty 50+
PA-0616	\$6.95	\$6.25	\$5.50
PA-0617	\$6.95	\$6.25	\$5.50
PA-0635	\$6.95	\$6.25	\$5.50

FME CONNECTORS

FME LINE

As used on some mobile phone car kits.

- Crimp
- Nickel plated
- Gold centre pin





See pages 140 & 314

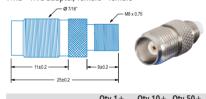
for crimp tools

RELATED PRODUCT

		Qty 1+	Qty 10+	Qty 50+
MALE	PP-0710	\$4.95	\$4.45	\$3.90
FEMALE	PS-0712	\$3.95	\$3.45	\$3.15

FME - TNC FEMALE ADAPTOR

FME - TNC adapter, female - female



25±	0.2			
		Qty 1+	Qty 10+	Qty 50+
P.A	k-0619	\$5.95	\$5.25	\$4.75

TNC CONNECTORS

LINE PLUGS

Solder connections.

Nickel plated

 Crimp style Nickel plated





SOLDER TYPE		Qty 1+	Qty 10+	Qty 50+
	PP-0664	\$3.95	\$3.45	\$3.15
CRIMP TYPE				
RG58U	PP-0665	\$3.95	\$3.45	\$3.15
RG5911	PP-0667	\$3.95	\$3.45	\$3.15

D CONNECTORS

D Male / Female

MALE SOLDER

All 'D' connectors have quality gold plated contacts & nickel plated shells. 9 PIN SHOWN



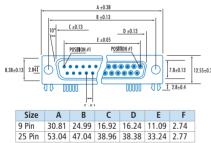
9 PIN SHOWN



RIGHT ANGLE FEMALE SOLDER







Sizes shown in mm

D-SUB IP67 HARSH ENVIRONMENT



Robust D-Sub connectors housed in industrial body and IP67 waterproof housing

- Current rating 5A,
- -40° to $+105^{\circ}$ C
- · Gold flash plating on contacts

MALE SOLDE	R	Qty 1+	Qty 10+	Qty 50+
9 Pin	PP-1216	\$17.95	\$15.95	\$14.35
25 Pin	PP-1226	\$19.95	\$17.70	\$15.70
FEMALE SOL	DER			
9 Pin	PS-1210	\$17.95	\$15.95	\$14.35
25 Pin	PS-1220	\$19.95	\$17.70	\$15.70

D - IDC

IDC MALE



IDC FEMALE



IDC MALE		Qty 1+	Qty 10+	Qty 50+
9 pin	PP-0802	\$3.95	\$3.45	\$3.15
15 pin	PP-0821	\$4.45	\$3.95	\$3.45
25 pin	PP-0842	\$4.65	\$4.15	\$3.60
IDC FEMALE				
9 pin	PS-0805	\$3.95	\$3.45	\$3.15
15 pin	PS-0825	\$4.45	\$3.95	\$3.45
25 pin	PS-0846	\$4.65	\$4.15	\$3.60

D Backshells



METAL Quality heavy duty metal backshells

- Ideal where RF screening is required.
- Rear entry.



ABS FLAMEPROOF D BACKSHELLS

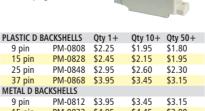
Top quality grey back shells with two cable entries.

- · Rear or side entry.
- Simply push out the tab required.
 Supplied with 2 long
- finger screws, cable clamp screws and hood fixing screws.
- · A quality range of backshells.

DB25/DB25 HOOD

Ideal for making you own special adaptors

- Accepts 2 x D25 connectors.
- · Either plugs or sockets.



		4-,	4.,	4.,	
9 pin	PM-0808	\$2.25	\$1.95	\$1.80	
15 pin	PM-0828	\$2.45	\$2.15	\$1.95	
25 pin	PM-0848	\$2.95	\$2.60	\$2.30	
37 pin	PM-0868	\$3.95	\$3.45	\$3.15	
METAL D BA	CKSHELLS				
9 pin	PM-0812	\$3.95	\$3.45	\$3.15	
15 pin	PM-0833	\$4.95	\$4.45	\$3.90	
25 pin	PM-0847	\$6.95	\$6.25	\$5.50	
ABS D BACK	SHELLS				
9 pin	PM-0810	\$2.95	\$2.60	\$2.30	
15 pin	PM-0830	\$3.25	\$2.90	\$2.60	
25 pin	PM-0850	\$3.95	\$3.45	\$3.15	
DB25/DB25	HOOD				
25 pin	PM-0851	\$3.95	\$3.45	\$3.15	

D Hardware

SUB HEX NUT EXTENDERS

Pkt of 8 pairs (16 pcs) 6mm hex nut extenders for D connectors

- Double female screw adaptor.
- Pack of 8 pairs

THUMB SCREWS FOR D BACKSHELLS

Pkt of 4 pairs (8 pcs) of universal thumb screws for D backshells.

- Total length 44mm.
- Pack of 4 pairs

JACK SCREW TO SUIT D-SUB

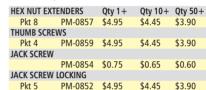
13mm length



LOCKING NUTS FOR D CONNECTORS

Packets of 5 pairs (10 pcs.) of D locking nuts.

- · Includes screws, nuts and washers 6mm length.
- Pack of 5 pairs



Locking Nut Set for D-Connectors

Suits D connectors

Length 13mm.



HEX NUT EXTENDERS Qty 10+ Qty 50+ PM-0855 \$2.95 \$2.60 \$2.30

Disk Drive - 4 Pin Connectors

DISK DRIVE POWER CONNECTOR - PLUG

Plug for wiring power to any standard drive. Has crimp pins.



DISK DRIVE PCB POWER PLUG



Socket for wiring power cables for use on any standard drive. Has crimp pins.



DISK DRIVE IDC POWER SOCKET

 Insulation displacement type



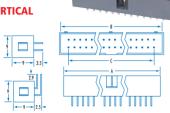
POWER PLU	G	Qty 1+	Qty 10+	
	PP-0743	\$1.95	\$1.75	\$1.55
PCB POWER	PLUG			
	PP-0744	\$1.45	\$1.30	\$1.15
POWER SOC	CKET			
	PS-0742	\$2.95	\$2.60	\$2.30
IDC POWER	SOCKET			
	PS-0740	\$3.95	\$3.45	\$3.15

IDC CONNECTORS

IDC Headers

All headers have gold plated pins.

VERTICAL



Dimensions (mm)	Pins	Α	В	C
Cat. PP-1100	10	20	18	10
Cat. PP-1106	16	28	26	18
Cat. PP-1110	26	41	38.5	30.5
Cat. PP-1112	34	51	49.5	41
Cat. PP-1114	40	58.5	56	48
Cat. PP-1116	50	71	69	61

Pins		Qty 1+	Qty 4+	Qty 10+	
10	PP-1100	\$0.95	\$0.85	\$0.75	
16	PP-1106	\$1.25	\$1.10	\$0.97	
26	PP-1110	\$1.65	\$1.45	\$1.30	
34	PP-1112	\$1.95	\$1.75	\$1.55	
40	PP-1114	\$2.25	\$1.95	\$1.80	
50	PP-1116	\$2.75	\$2.45	\$2.15	

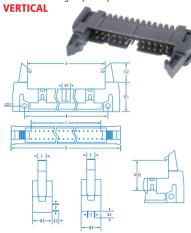


Dimensions (mm)	Pins	Α	В	C
Cat. PP-1118	10	20	18	10
Cat. PP-1122	16	28	26	18
Cat. PP-1126	26	41	38.5	30.5
Cat. PP-1128	34	51	49.5	41
Cat. PP-1132	50	71	69	61

Pins		Qty 1+	Qty 4+	Qty 10+	
10	PP-1118	\$1.25	\$1.10	\$0.97	
16	PP-1122	\$1.45	\$1.30	\$1.15	
26	PP-1126	\$1.75	\$1.55	\$1.40	
34	PP-1128	\$2.25	\$1.95	\$1.80	
50	PP-1132	\$2.95	\$2.60	\$2.30	

IDC Locking Headers

All headers have gold plated pins.



Dimensions (mm)	Pins	Α	В	C	D
Cat. PP-1134	10	32	10	22	18
Cat. PP-1138	16	39.5	18	29.5	25.5
Cat. PP-1140	20	45	23	34.5	31
Cat. PP-1142	26	52	30.5	42	38
Cat. PP-1144	34	62	41	52	48.5
Cat. PP-1148	50	83	61	73	69
Pins		Otv 1+	Ot	v 4+	Otv 10

Pins		Qty 1+	Qty 4+	Qty 10+
10	PP-1134	\$1.25	\$1.10	\$0.97
16	PP-1138	\$1.65	\$1.45	\$1.30
20	PP-1140	\$1.95	\$1.75	\$1.55
26	PP-1142	\$2.25	\$1.95	\$1.80
34	PP-1144	\$2.75	\$2.45	\$2.15
50	PP-1148	\$3.75	\$3.30	\$2.95

IDC Locking Headers (continued) RIGHT ANGLE



Cat. PP-1154		16	39.5	18	29.5	25.5	
Cat. PP-1158		26	52	30.5	42	38	
Cat. PP-1160		34	62	41	52	48.5	
Cat. PP-1164		50	83	61	73	69	
Pins			Qty 1	+ (Qty 4+	Qty	10+
10	PP-1	150	\$1.45	5 !	\$1.30	\$1.1	15
16	PP-1	154	\$1.75	5 :	\$1.55	\$1.4	10
26	PP-1	158	\$2.25	5 !	\$1.95	\$1.8	30
34	PP-1	160	\$2.95	5 :	\$2.60	\$2.3	30
50	PP-1	164	\$3.00		\$3.45	\$3.1	15

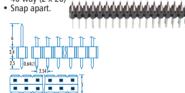
IDC LINE SOCKETS

- Insulation displacement connection Suits standard pitch
- ribbon cable

TIDDOTT CODE	-			500
Pins		Qty 1+	Qty 10+	Qty 50+
10	PS-0984	\$1.65	\$1.45	\$1.30
16	PS-0985	\$1.85	\$1.65	\$1.45
20	PS-0986	\$1.95	\$1.75	\$1.55
26	PS-0987	\$2.25	\$1.95	\$1.80
34	PS-0988	\$2.65	\$2.30	\$2.07
40	PS-0989	\$2.95	\$2.60	\$2.30
50	PS-0990	\$3.45	\$3.05	\$2.75

DUAL IN-LINE JUMPERS

40 way (2 x 20) • Snap apart.



Pins		Qty 1+	Qty 4+	Qty 10+
40	HM-3250	\$1.75	\$1.55	\$1.40

HEADER TERMINAL STRIPS 28 & 40 PIN VERTICAL LAUNCHER - 0.1" / 2.54mm Pitch

For PCBs and PCB mass terminals. Snap apart if you need a small length



	-12.54	•		
Pins		Qty 1+	Qty 4+	Qty 10+
28	HM-3211	\$0.85	\$0.75	\$0.65
40	HM-3212	\$0.95	\$0.85	\$0.75

JUMPER SHUNTS

2.54mm spacing. Pkt 10



Pkt		Qty 1+	Qty 4+	Qty 10+
10	HM-3240	\$1.85	\$1.65	\$1.45

Stackable Header **Set for Arduino**

The perfect accessory to the ProtoShield Basic, Pro, and vero type boards when connecting to your Arduino compatible project. Stackable headers have female sockets on the top side and male pins underneath, allowing you to conveniently stack boards and shields up in your project.



• 2 x 8 pin and 2 x 6 pin included to suit the Eleven, EtherTen, USBDroid and ProtoShields

7		Qty 1+	Qty 4+	Qty 10+
	HM-3207	\$2.95	\$2.60	\$2.30

USB CONNECTORS

TYPE A & TYPE B PLUGS





Type		Qty 1+	Qty 10+	Qty 50+
Α	PP-0790	\$2.45	\$2.15	\$1.95
В	PP-0792	\$2.45	\$2.15	\$1.95

TYPE A & TYPE B PC MOUNT SOCKETS 4P40





PA-0930

PA-0931

LTW

Type		Qty 1+	Qty 10+	Qty 50+
Α	PS-0916	\$2.95	\$2.60	\$2.30
В	PS-0920	\$2.95	\$2.60	\$2.30

USB 3.0 Adaptors

- USB 3.0 Plug B to Socket A Cat PA-0930
- USB 3.0 Micro B Plug to Socket A Cat PA-0931
- USB 3.0 Socket A to Socket A Cat PA-0932
- USB 3.0 Plug Micro B to Socket B Cat PA-0933



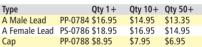
7		Qty 1+	Qty 4+	Qty 10+
	PA-0930	\$9.95	\$8.75	\$7.75
	PA-0931	\$9.95	\$8.75	\$7.75
	PA-0932	\$9.95	\$8.75	\$7.75
	PA-0933	\$9.95	\$8.75	\$7.75

TYPE A IP67 RATED PLUG CABLES

Industrial USB connectors encased in robust housing with IP67 seal.

- Current rating 1.5A
 -40° to +105°C
- PBT UL94V-0 body

PP-0784 A-Type Male 1m Cable PS-0786 A-Type Female 1m Cable PP-0788 Waterproof Cap

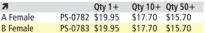


TYPE B PANEL MOUNT USB SOCKETS

Panel-mounting Type B USB socket.

· Suits panels up to 10mm thick

 Mounting hole 20mm
PS-0782 A Type Female PS-0783 B Type Female



TYPE B IP67 RATED PLUG CABLES

Popular USB Type B connector.
• IP67 rated for harsh environments

- 1 metre cable extension.

Plug or socket version available:

PP-0785: IP67 Rated Type B USB Plug Cable

• PS-0781: IP67 Rated Type B USB Socket Cable





7		Qty 1+	Qty 10+	Qty 50+
	PP-0785	\$16.95	\$14.95	\$13.35
	PS-0781	\$18.95	\$16.95	\$14.95

T

RJ45 MODULAR

Modular Plugs

50μ" Gold Contact

8/8 - RJ45 Not ACMA Approved





Pkt		Qty 1+	Qty 5+	Qty 20+
10	PP-1436	\$7.95	\$6.95	\$6.25

SCREENED 8 PIN FOR STRANDED CABLE 8P8C with full screening and round cable entry for

STP cable.



Pkt		Qty 1+	Qty 5+	Qty 20+
10	PP-1437	\$14.95	\$13.35	\$11.70

8 PIN FOR CAT6 STRANDED CABLE

8P8C round cable entry for connection to Cat6 UTP.





RJ45 STRAND	ED	Qty 1+	Qty 5+	Qty 20+
Pkt 10	PP-1447	\$13.95	\$12.35	\$10.95

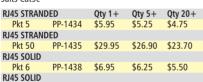
8 PIN FOR FLAT STRANDED CABLE 8/8 - RI45





8 PIN FOR ROUND SOLID CORE CABLE





\$34.95

RI45 ROOTS

Pkt 50

A packet of boots to suit RJ45 8/8 plugs.



\$27.90

\$31.45

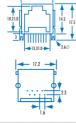
Pkt		Qty 1+	Qty 5+	Qty 20+	
4	PM-1441	\$4.95	\$4.45	\$4.15	
50 Blue	PM-1442	\$15.50	\$13.70	\$12.95	

8 PIN PCB MODULAR SOCKET

PP-1439

Side entryNot ACMA approved





Туре	Qty 1+	Qty 10+	Qty 50+
8/8 - RJ45 PS-1478	\$2.45	\$2.15	\$1.95

RJ45 CONNECTORS IP67 RATED LTW This set of connectors makes it safe to

use RJ45 connectors in harsh environments. Rated to IP67 they are dust tight and water tight making them handy for control and communications applications outdoors or industy workshops.







50 PP-1452	PP-
------------	-----

Type		Qty 1+	Qty 10+	Qty 50+
Socket	PS-1450	\$27.95	\$24.95	\$22.35
Plug	PP-1452	\$14.95	\$13.35	\$11.70
Cap	PP-1454	\$8.95	\$7.95	\$6.95

RJ11/12 MODULAR

50μ" Gold Contact

6 PIN FOR

6/6 - RJ12

4 PIN FOR STRANDED CABLE 4/4 - RJ11







RJ11		Qty 1+	Qty 5+	Qty 20+
Pkt 5	PP-1430	\$2.45	\$2.15	\$1.95
RJ11				
Pkt 50	PP-1431	\$19.95	\$17.70	\$15.70
RJ12				
Pkt 5	PP-1432	\$2.95	\$2.60	\$2.30
RJ12				
Pkt 50	PP-1433	\$23.95	\$21.35	\$18.95

PCB MODULAR SOCKETS

Side entry. Not ACMA Approved





7.9	2.6∅			
Туре		Qty 1+	Qty 10+	Qty 50+
4/4 - RJ11	PS-1470	\$1.65	\$1.45	\$1.30
6/6 - RJ12	PS-1474	\$1.95	\$1.75	\$1.55

TELEPHONE

RI12

For other telephone leads, adaptors - see our

IT & Comms section.

• Blister pack. • ACMA Approved

PLUG 610 TYPE PLUG 610 TYPE WALL SKT **LINE SKT** PS-1412

	Qty 1+	Qty 5+	Qty 20+
PS-1410	\$6.95	\$6.25	\$5.50
PS-1412	\$6.95	\$6.25	\$5.50

WALLPLATES & KEYSTONE SKTS

Inserts for Keystone Wallplates

YN-8027

RI45 Cat5e YN-8028

RJ45 Cat6 YN-8029

RELATED PRODUCT See page 234 for wallplates to suit



\$4 95

\$4.95

\$4.95

Our premium Australian / NZ flush plates not only accept our Cat 5e jacks shown below, they are also compatible with many other standard Australian mechanisms and jacks. The 2 piece design has a separate back plate and cover which is easily removed for painting.

- Fits standard Australian/NZ electrical switch plate installation hardware and screw centres.
- Perfect for easy flush installation on Gyprock walls.
 Supplied unloaded without jacks
- (see cat. YN-8036 below).
- Dimensions 116(W) x 75(H) x 13(D)mm.







Cat. YN-	8015	Cat. YN-8016	Ca	t. YN-8017
		Qty 1+	Qty 4+	Qty 10+
Single	YN-8015	\$5.95	\$5.25	\$4.75
Double	YN-8016	\$5.95	\$5.25	\$4.75
Triple	YN-8017	\$5.95	\$5.25	\$4.75

RJ12 IDC Socket for Flush Plates

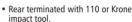
Voice grade RJ12 6P4C IDC jack with 2 IDC connections per contact allowing easy loop-in, loop-out for typical voice applications. Compatible with most standard Australian flush plates. Rear termination with IDC impact tool.



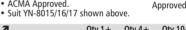
	Qty 1+	Qty 5+	Qty 20+
YN-803	35 \$12.95	\$11.35	\$10.35

Cat 5e IDC Jack to Suit Australian / NZ Style Flush Plates

Our premium Cat 5e IDC data jack is designed to suit our wallplates shown above. They also suit many other brands of Australian/NZ flush plates.



- T568A & T568B colour coding for easy installation.
- ACMA Approved



Qty 1+ Qty 10+ YN-8036 \$12.95 \$11.35 \$10.35

Keystone Surface Box

Side entry surface mount boxes to accept our standard keystone



ACMA

- Snap-on cover for easy installation & access to wiring. · Single and duplex versions available
- Double sided tape for easy installation.
 Supplied unloaded without
- keystone jacks.

Colour is white.



\$10.35

Ϡ WxHxD(mm)		Qty 1+	Qty 4+	Qty 10+
Single 30x60x26	YN-8022	\$5.95	\$5.25	\$4.75
Double 55x60x26	YN-8024	\$5.95	\$5.25	\$4.75

110 Keystone Jack

YN-8030

Suitable for use with our keystone wall plates and keystone surface boxes.

 For termination with ISBY impact tool and has combined 568A and T568B colour coding for easy installation.



\$12.95

\$3.90

\$3.90

\$3.90

\$4.45

\$4.45

\$4.45



11 0314			
9.5mm SHAFT LENGTH			
0.7(ID) x 2.5(OD)mm	Qty 1+	Qty 10+	Qty 50+
PP-0503	\$1.95	\$1.75	\$1.55
1.0(ID) x 3.8(OD)mm			
PP-0504	\$1.95	\$1.75	\$1.55
1.3(ID) x 3.5(OD)mm			
PP-0506	\$1.95	\$1.75	\$1.55
1.6(ID) x 5.2(OD)mm			
PP-0508	\$1.95	\$1.75	\$1.55
1.7(ID) x 4.0(OD)mm	** **	44.75	
PP-0507	\$1.95	\$1.75	\$1.55
1.7(ID) x 4.75(OD)mm	¢1.05	¢4.75	¢4 FF
PP-0505	\$1.95	\$1.75	\$1.55
2.1(ID) x 5.5(OD)mm PP-0510	¢1 OF	¢1 7E	¢1 FF
10mm SHAFT LENGTH	\$1.95	\$1.75	\$1.55
2.5(ID) x 5.5(OD)mm			
PP-0511	¢1 05	\$1.75	\$1.55
3.1(ID) x 6.3(OD)mm	Ψ1.55	ψ1.7J	۷۱.۵۵
PP-0513	\$1.95	\$1.75	\$1.55
14mm SHAFT LENGTH	Ψ1.55	ψ1.73	ψ1.55
2.1(ID) x 5.5(OD)mm			
PP-0509	\$1.95	\$1.75	\$1.55
2.5(ID) x 5.5(OD)mm			
PP-0512	\$1.95	\$1.75	\$1.55
RIGHT ANGLE - 9.5mm S	HAFT LENG	TH	
2.1(ID) x 5.5(OD)mm			
PP-0514	\$2.65	\$2.30	\$2.07
RIGHT ANGLE - 14mm SI	HAFT LENGT	ГН	
2.1(ID) x 5.5(OD)mm			

METAL BODY LINE - FEMALE 9.5mm shaft.

PP-0515 \$2.65



\$2.30

2.1(ID) x 5.5(OD)mm	Qty 1+	Qty 10+	Qty 50+
PP-0531	\$3.75	\$3.30	\$2.95
2.5(ID) x 5.5(OD)mm			
PP-0532	\$3.75	\$3.30	\$2.95
Line Oneliete			

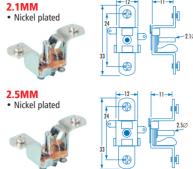
Line Sockets **LINE - MALE**



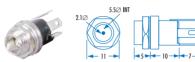
ty 50+
2.75
2.75
1.95

METAL B	ODY			
PP-053	34		1	PP-0536
2.1mm		Qty 1+	Qty 10+	Qty 50+
	PS-0534	\$3.95	\$3.45	\$3.15
2.5mm				
	PS-0536	\$3.95	\$3.45	\$3.15

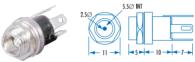
Chassis Mount



2.1MM BULKHEAD MALE



2.5MM BULKHEAD MALE



The part of the pa	14 11	1.3.1.	0 -1-7-1
2.1mm CHASSIS	Qty 1+	Qty 10+	Qty 50+
PS-0516	\$2.50	\$2.21	\$1.95
2.5mm CHASSIS			
PS-0518	\$2.50	\$2.21	\$1.95
2.1mm BULKHEAD			
PS-0522	\$3.45	\$3.05	\$2.75
2.5mm BULKHEAD			
PS-0524	\$3.45	\$3.05	\$2.75

Surface Mount

2.5MM PC MOUNT MALE SPST contacts.

1.6MM SWITCHED DC CHASSIS MALE

Packet of 10



2.5mm		Qty 1+	Qty 10+	Qty 50+
	PS-0520	\$1.95	\$1.75	\$1.55
1.6mm SWIT	CHED	Qty 1+	Qty 10+	Qty 25+
Pkt 10	PS-0530	\$22.95	\$20.35	\$18.35

DC Connector & Line Plug - IP67

•2.5 mm DC connector Cat. PS-0789 • DC line plug with 1 metre cable Cat PP-0787



	Qty 1+	Qty 10+	Qty 50+
PS-0789	\$14.95	\$13.35	\$11.70
PP-0787	\$12.95	\$11.35	\$10.35

2.1mm DC Connectors with Spring Terminals 2.1MM DC PLUG WITH SPRING TERMINALS PA-3711

2.1MM DC SOCKET WITH **SPRING TERMINALS** PA-3713



DC Power Adaptors

2.1MM DC PLUG TO 2.1MM DC PLUG 2.5MM DC PLUG TO 2.5MM DC PLUG

2.1MM DC SOCKET TO 2.1MM DC SOCKET

2.5MM DC SOCKET TO 2.5MM DC SOCKET

2.1MM DC PLUG TO **FAST-ON (BAREWIRES)**

Very handy way of terminating a bare wire connection to a 2.1mm DC plug or socket for CCTV testing and installations. No need for soldering or crimping, simply connect with the spring terminals.



PA-3710

PA-3701

2.1MM DC SOCKET TO **FAST-ON (BAREWIRES)**

DC PLUG TO 6310 **NOKIA® ADAPTOR**

The new Nokia® phones have a smaller DC charging plug. This accepts the larger DC plug and converts it to the smaller one, enabling you to have a spare charger at work etc. Gotcha!

2 4 4 - 2	4 Dl	04 4 .	04 40	O4 FO :
2.1mm to 2.	imm Piug	Qty 1+	Qty 10+	Qty 50+
	PA-3707	\$2.95	\$2.60	\$2.30
2.5mm to 2.	5mm Plug			
	PA-3709	\$2.95	\$2.60	\$2.30
2.1mm to 2.	1mm Skt			
	PA-3701	\$3.45	\$3.05	\$2.75
2.5mm to 2.	5mm Skt			
	PA-3708	\$3.45	\$3.05	\$2.75
2.1mm to Fa		\$3.45 Qty 1+	\$3.05 Qty 10+	\$2.75 Qty 50+
2.1mm to Fa				
2.1mm to Fa	st-on PA-3705	Qty 1+	Qty 10+	Qty 50+
	st-on PA-3705	Qty 1+	Qty 10+	Qty 50+
	PA-3705 PA-3703	Qty 1 + \$6.95	Qty 10+ \$6.25	Qty 50+ \$5.75
2.1mm to Fa	PA-3705 PA-3703	Qty 1+ \$6.95	Qty 10+ \$6.25 \$6.25	Qty 50 + \$5.75 \$5.75

Illuminated Polarity Sensing DC Connectors

Simplifies installation of your CCTV cameras and other security applications. They detect and indicate the polarity of your power connections with integrated LEDs. The LED lights up either blue for centre positive, red for centre negative or purple for AC voltage. They also shine brighter as voltage increases. 5-30 VAC/VDC range, 1 metre lead length.

Pluq Cat. WQ-7288 Inline Socket Cat. WQ-7289



DC Power Adaptors *



1.3MM DC PLUG TO 2.5MM DC SOCKET Cat. PA-3700

1.3MM DC PLUG TO 2.1MM DC SOCKET Cat. PA-3702

2.1MM DC PLUG TO 2.5MM DC SOCKET Cat. PA-3704

2.5MM DC PLUG TO 2.1MM DC SOCKET Cat. PA-3706

1.3mm to 2.	5mm	Qty 1+	Qty 10+	Qty 50+
	PA-3700	\$2.95	\$2.60	\$2.30
1.3mm to 2.	1mm			
	PA-3702	\$2.95	\$2.60	\$2.30
2.1mm to 2.	5mm			
	PA-3704	\$2.95	\$2.60	\$2.30
2.5mm to 2.	1mm			
	PA-3706	\$2.95	\$2.60	\$2.30

T

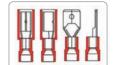
Connectors - Quick Connect

STANDARD QUICK CONNECTORS

NYLON INJECTION MOULDING

DID AUTI KNOM3

Unlike the majority of quick crimp connectors available on the market, our range of standard quick connectors are made with a nylon injection moulded insulation as opposed to the heat shrunk vinyl insulation most others feature. The injection-moulded nylon insulation is temperature rated to 105°C, and features a moulded funnel taper in the insulation for easy cable entry.



BULLETS

- Red: Cable entry size 4.3mm Wire size 0.75 - 1mm dia
- Blue: Cable entry size 4.5mm Wire size 1.5 - 2.5mm dia
- Yellow: Cable entry size 6.6mm Wire size 4 - 6mm dia.

					Rohs
A	В	C	D	E	F

ID Type	Size	Pkt	Cat.	Qty 1+	Qty 4+	Qty 10+	Pkt	Cat.	Qty 1+	Qty 4+	Qty 10+
A Male	4	8	PT-4500	\$3.50	\$3.15	\$2.75	50	PT-4501	\$9.95	\$8.75	\$7.75
B Male	4	8	PT-4600	\$3.50	\$3.15	\$2.75	100	PT-4601	\$15.95	\$14.35	\$12.70
C Male	4	8	PT-4700	\$3.75	\$3.30	\$2.95	100	PT-4701	\$18.95	\$16.95	\$14.95
D Female	4	8	PT-4502	\$3.50	\$3.15	\$2.75	50	PT-4503	\$9.95	\$8.75	\$7.75
E Female	4	8	PT-4602	\$3.50	\$3.15	\$2.75	100	PT-4603	\$15.95	\$14.35	\$12.70
F Female	4	8	PT-4702	\$3.75	\$3.30	\$2.95	100	PT-4703	\$18.95	\$16.95	\$14.95

SPADES

- Red: Cable entry size 4.3mm Wire size 0.75 - 1mm dia
- Blue: Cable entry size 4.5mm Wire size 1.5 - 2.5mm dia.
- Yellow: Cable entry size 6.6mm Wire size 4 - 6mm dia

0		A.	J		=	B .	RoHS
A	В		c	D		E	

ID Type	Size	Pkt	Cat.	Qty 1+	Qty 4+	Qty 10+	Pkt Cat.	Qty 1+	Qty 4+	Qty 10+
A Male	4.8	8	PT-4518	\$2.75	\$2.45	\$2.15	100 PT-4519	\$13.95	\$12.35	\$10.95
B Female	4.8	8	PT-4522	\$2.75	\$2.45	\$2.15	100 PT-4524	\$13.95	\$12.35	\$10.95
C Female	4.8	8	PT-4622	\$2.75	\$2.45	\$2.15	100 PT-4621	\$14.95	\$13.35	\$11.70
D Female	4.8	8	PT-4722	\$3.45	\$3.05	\$2.75	100 PT-4721	\$17.95	\$15.95	\$14.35
E Piggybk	6.4	8	PT-4510	\$2.75	\$2.45	\$2.15	100 PT-4511	\$13.95	\$12.35	\$10.95
		-								



ib type	JIZC	1 1/4	cut.	Qty I I	QLy TI	Qty IO I	11111	cut.	Qty I I	QLy TI	Qty 10 1
A Male	6.4	8	PT-4509	\$2.75	\$2.45	\$2.15	100	PT-4512	\$13.95	\$12.35	\$10.95
B Male	6.4	8	PT-4609	\$2.75	\$2.45	\$2.15	100	PT-4610	\$14.95	\$13.35	\$11.70
C Male	6.4	8	PT-4709	\$3.45	\$3.05	\$2.75	100	PT-4710	\$17.95	\$15.95	\$14.35
D Female	6.8	8	PT-4507	\$2.75	\$2.45	\$2.15	100	PT-4513	\$13.95	\$12.35	\$10.95
E Female	6.4	8	PT-4607	\$2.75	\$2.45	\$2.15	100	PT-4608	\$15.95	\$14.35	\$12.70
F Female	6.8	8	PT-4707	\$2.75	\$2.45	\$2.15	100	PT-4708	\$18.95	\$16.95	\$14.95
G Female	6.8	8	PT-4525	\$2.75	\$2.45	\$2.15	50	PT-4526	\$9.95	\$8.75	\$7.75
H Female	6.4	8	PT-4625	\$2.95	\$2.60	\$2.30	50	PT-4626	\$9.95	\$8.75	\$7.75
I Female	6.8	8	PT-4725	\$3.75	\$3.30	\$2.95	50	PT-4726	\$12.95	\$11.35	\$10.35

EYE. FORK, BUTT & BLADES

- Red: Cable entry size 4.3mm / Wire size 0.75 1mm dia
- Blue: Cable entry size 4.5mm / Wire size 1.5 2.5mm dia.
- Yellow: Cable entry size 6.6mm / Wire size 4 6mm dia

Tellow.	Cable el	iti y S	126 0.01111	II / Wille S	126 4 - 0111	III uia.				Section and the
A	B B	0	c	D	E	F G	н	1	J K	L
ID Type	ID/OD	Pkt	Cat.	Qty 1+	Qty 4+	Qty 10+	Pkt Cat.	Qty 1+	Qty 4+	Qty 10+
A Eye	5.3/8.0	8	PT-4514	\$2.75	\$2.45	\$2.15	100 PT-4515	\$13.95	\$12.35	\$10.95
B Eye	5.3/9.5	8	PT-4614	\$2.75	\$2.45	\$2.15	100 PT-4615	\$14.95	\$13.35	\$11.70
C Eye	5.3/9.5	8	PT-4714	\$3.75	\$3.30	\$2.95	100 PT-4715	\$17.95	\$15.95	\$14.35
D Fork	3.7/5.7	8	PT-4523	\$2.75	\$2.45	\$2.15	100 PT-4529	\$13.95	\$12.35	\$10.95
E Fork	3.7/5.7	8	PT-4623	\$2.75	\$2.45	\$2.15	100 PT-4624	\$14.95	\$13.35	\$11.70
F Fork	3.7/8.1	8	PT-4723	\$3.75	\$3.30	\$2.95	100 PT-4724	\$17.95	\$15.95	\$14.35
G Butt	4.7	8	PT-4527	¢2.7E	\$2.45	\$2.15	100 PT-4528	¢42 0F	\$12.35	\$10.95

\$2.15

\$2.95

\$2.15

\$2 15

\$2.95

\$2.45

\$3.30

\$2.45

\$2.45

\$3.30

SELF SEALING QUICK CONNECTORS

The unique heat sensitive sealing gel in these quick connectors will automatically flood the crimp joint with sealant as the heatshrink sleeve is heated. The resulting crimp connection is water and corrosion resistant and has good strain relief properties. 11 styles to choose from.

BULLETS



ID	Type	Size	Pkt	Cat.	Qty 1+	Qty 4+	Qty 10+
Α	Male	4	8	PT-4800	\$5.95	\$5.25	\$4.75
В	Female	4	8	PT-4802	\$6.95	\$6.25	\$5.50

SPADES



PT-4807 \$5.95

PT-4825 \$6.95

F Piggyback 6.4mm	8
EYE. FORK	
O. DIITT	

E Female Ins.6.4mm

6.4mm 8

8

D Female



\$5.25

\$6.25

\$4.75

\$5.50

ID Type	Size	Pkt	Cat.	Qty 1+	Qty 4+	Qty 10+
A Eye	5.3 ID	8	PT-4814	\$5.95	\$5.25	\$4.75
B Fork 3.7ID	5.70D	8	PT-4823	\$5.95	\$5.25	\$4.75
C Butt	4.7	8	PT-4827	\$6.95	\$6.25	\$5.50

QUICK SPLICE CONNECTORS

Simply insert your wires and squeeze it closed to connect and crimp. Quick, easy, and secure. Nylon insulation rated to 105°C







ID	Туре	Pk	Cat.	Qty 1+	Qty 4+	Qty 10+
Α	22-18AWG	6	PT-4537	\$2.75	\$2.45	\$2.15
В	16-14AWG	6	PT-4637	\$2.75	\$2.45	\$2.15
C	12-10AWG	6	PT-4737	\$2.75	\$2.45	\$2.15

NON-INSULATED SPADE CONNECTORS





ID	Type	Size	Pk	Cat.	Qty 1+	Qty 4+	Qty 10+
Α	Socket	6.3mm	10	PT-4630	\$2.75	\$2.45	\$2.15
В	Plug	6.3mm	10	PT-4631	\$2.75	\$2.45	\$2.15

NON-INSULATED EYE TERMINALSA range of non-insulated eye terminals for a variety of electronic or automotive applications. Use Crimp Tool TH-1849 see page 141.



A B		D) F	G	H
ID Size	Cable Entry	Pk	Cat.	Qty 1+	Qty 4+	Qty 10+
A 4mm	2.5mm ²	8	PT-4930	\$2.75	\$2.45	\$2.15
D 6mm	1mm?	0	DT 4022	¢2.7E	¢2 4E	¢2.1E

Α	4mm	2.5mm ²	8	PT-4930	\$2.75	\$2.45	\$2.15	
В	6mm	4mm ²	8	PT-4932	\$2.75	\$2.45	\$2.15	
C	6mm	6mm ²	8	PT-4934	\$2.75	\$2.45	\$2.15	
D	8mm	6mm ²	8	PT-4935	\$2.75	\$2.45	\$2.15	
Ε	8mm	10mm ²	8	PT-4936	\$3.45	\$3.05	\$2.75	
F	8mm	25mm ²	4	PT-4937	\$3.95	\$3.45	\$3.15	
G	8mm	35mm ²	4	PT-4938	\$5.95	\$5.25	\$4.75	
Н	8mm	50mm ²	2	PT-4939	\$4.95	\$4.45	\$3.90	

8

PT-4627 \$2.75

PT-4727 \$3.75

PT-4516 \$2.75

PT-4618 \$2.75

PT-4718 \$3.75

H Butt

I Butt

K Eye

L Eye

J Blade

5.7

4 - 6 8

8 x 2.8 8

8.4/12 8 \$13.35

\$15.95

\$12.35

\$12.35

\$12.35

\$11.70

\$14.35

\$10.95

\$10.95

\$10.95

100 PT-4628 \$14.95

100 PT-4728 \$17.95

100 PT-4517 \$13.95

100 PT-4517 \$13.95

100 PT-4517 \$13.95

QUICK CONNECTORS/TAGSTRIPS

Chassis Mount Spade Terminals

This range of quick connect terminals have a mounting hole for an M3 screw.

• Suitable for chassis mounting or mounting onto a PCB for high current applications

PT-4902





Pkt 8		
Type	/	I

lype / Angle	Qty 1+	Qty 4+	Qty 10+
1 Spade / 45° PT-4910	\$2.75	\$2.45	\$2.15
2 Spade / 45° PT-4900	\$3.45	\$3.05	\$2.75
2 Spade / 90° PT-4905	\$3.45	\$3.05	\$2.75
-1			

1 Spade / 45° PT-4912 \$19.95 2 Spade / 45° PT-4902 \$22.50 \$15.70 \$17.95 \$17.70 \$19.95 2 Spade / 90° PT-4907 \$22.50 \$19.95 \$17.95

Tagstrips





Туре		Qty 1+	Qty 4+	Qty 10+
2 Way	HM-3302	\$0.60	\$0.52	\$0.47
3 Way	HM-3303	\$0.70	\$0.62	\$0.55
4 Way	HM-3304	\$0.80	\$0.70	\$0.62
5 Way	HM-3305	\$0.85	\$0.75	\$0.65
8 Way	HM-3308	\$0.95	\$0.85	\$0.75

Tagboard

2 tagboards per pack with 8 tin plated lugs per side.

• Dimensions: 80(L) > 32(W)mm including lugs

RED - FOR 0.75 - 1.0MM CABLE

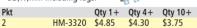
20 x 4mm/20 x 5mm ring 20 x 4mm fork/25 x female spade

25 x male spade/10 x cable joiner BLUE - FOR 1.5 - 2.5MM CABLE 15 x female/20 x male bullet 20 x 4mm/10 x 6mm ring

20 x female/20 x male bullet

25 x female/25 x male spade

10 x cable joiner



300 Piece QC Crimp Connector Pack



easy cable entry. Beware of other QC connector packs that contain cheap vinyl connectors. Pack contains (300pcs in total):

Contains 300pcs of only the most commonly-used quick connectors from our range of separately sold QC connectors. Insulation is injection-moulded Nylon rated to 105°C, with a moulded funnel taper in the insulation for

YELLOW - FOR 4-6MM CABLE 5 x 5mm/5 x 6mm ring

5 x cable joiner

PT-4536



Otv 10+ \$31.45 \$27.90

Extra Large Eve Terminals **0GA Red Black Pair**

Suits thick cable (OGA)

- Hole Size 8.4mm
- Cable hole diameter 11.8mm
- · 60mm including cover Metal thickness - 1.6mm

Otv 10+ PT-4567 \$6.25 \$6.95

Gold Plated Power Terminals

Each has a grub screw for attaching to the power cable.

Run cables to equipment & terminals. All 8mm bolt hole. Cat HC-4068: 52mm length

Cat HC-4066: 57mm length Cat HC-4062: 56mm length



Connect OG cable to 4G screw down connections Cat HC-4069: 8.6mm shaft / 55mm length

Туре		Qty 1+	Qty 4+	Qty 10+	
0GA	HC-4062	\$8.95	\$7.95	\$6.95	
2GA	HC-4066	\$8.95	\$7.95	\$6.95	
4GA	HC-4068	\$8.95	\$7.95	\$6.95	
0-4GA	HC-4069	\$8.95	\$7.95	\$6.95	

Gold Plated Crimp Connector 12.7mm Eye Red & Black Pair

Suits 2GA cable.

- Eye hole size: 12.7mm Cable hole dia.:9.6mm
- 60mm including cover
- Metal thickness 1.5mm

Supplied as a pair - one red, one black.

Qty 1+ Qty 4+ Qty 10+ PT-4565 \$5.95 \$5.25

Phone Type Crimp Lugs

Brass Spade width - 3.2mm Cable entry 2.5mm

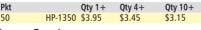


Solder Lugs

Solder lugs for any

- screw down connection.
- Length: 17.6mm ID#1: 4.3mm
- ID#2: 2.0mm





\$3.95

Large Spade Quick Connectors

- Spade socket 9.5mm
- Pack of 4

Suits 60A horn relay SY-4066

PT-4717



\$3.45





\$3.15

ID#1

Ferrule Crimp Connectors

ID	Pk	Size	Qty 1+	Qty 4+	Qty 10+
Α	20	0.75mm ² PT-4433	\$2.95	\$2.60	\$2.30
В	20	1.50mm ² PT-4533	\$2.95	\$2.60	\$2.30
C	20	2.5mm ² PT-4633	\$2.95	\$2.60	\$2.30

JST CRIMP CONNECTORS 2-WAY



IST type crimp connectors for hobby use. Extensively used on batteries and other connectors in RC hobbies and models. Sold as a pair of 2 mating M/F connectors. Suitable for cable up to 1.3mm OD.

	Qty	≀1+ Qty	10+ Qty 50	+
PT-4	1452 \$4.	.95 \$4.	45 \$3.90	

Quick Connect Pack

A box of all the standard 1/4" (6.35mm) QC tabs and receptacles, but also the odd OC sizes



ie: 3.3mm and 4.8mm sizes. Total 160 pieces.

- 10 x 6.4mm female crimp spade lugs wire dia 1.8mm
 10 x 6.4mm female crimp spade lugs wire dia 3.5mm
- 10 x Close end wire crimpers dia 2.6mm
- 10 x Close end wire crimpers dia 3.8mm
- 5 x Contact wire connectors
- 10 x Female bullet connectors insulated
- 10 x Male bullet connectors insulated
- 5 x 3 way spade lug connectors 6.8mm
- 5 x spade piggyback connectors 6.8mm 10 x 4.9mm female spade lugs

- 10 x 8.4mm hole dia ring terminals 10 x 5.7mm hole dia ring terminals
- 10 x 5.3mm hole dia spade terminals
- 10 x 4.3mm hole dia spade terminals
- 5 x 3.5mm dia butt connectors
- 5 x 2.3mm dia butt connectors 5 x 1.8mm dia butt connectors
- 10 x 3.3mm spade connectors (tweeter connectors)

Beware of others with less than 160 pieces...

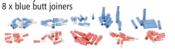
PT-4530 \$22.95 \$20.35 \$18.35

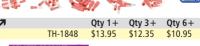
Automotive Crimp Tool with 80 Connectors



The tool will cut & strip wire, crimp connectors and also cut a range of metric bolts.

8 each of male & female blue bullets 8 each of male & female red bullets 8 each of male & female blue spades 8 each of male & female red spades 8 x red eve connectors





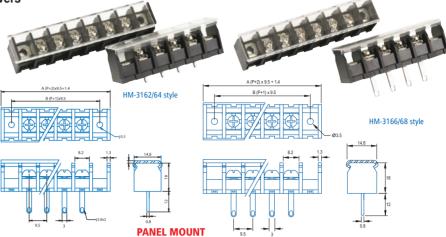
More Crimpings Tools on page 140-142

Connectors - Locking Headers

HEADER CONNECTORS

Terminal Barriers - Transparent Covers

Specifications	
Pitch	9.5mm
Barrier Material	Thermoplastic (UL-94V-0), Black
Terminals	Tin Plated Brass (Standard)
Screws	Nickel Plated Steel
Wire Range AWG	12-22 STR
Rating	25 Amp, 300VAC
Cover Material	PC
Insulation withstands voltage	AC 2000V/Min
Insulation Resistance	500Mohm or more at 500V



PC MOUNT

Housing: Temperature

6

10

7		Qty 1+	Qty 4+	Qty 10+	71	Qty 1+	Qty 4+	Qty 10+
4 Way	HM-3162	\$3.95	\$3.45	\$3.15	4 Way HM-3166	\$3.95	\$3.45	\$3.15
6 Way	HM-3164	\$5.50	\$4.90	\$4.30	6 Way HM-3168	\$5.50	\$4.90	\$4.30

0.1" (2.54mm) Locking and Polarising Header Connectors

A range of connectors for PCB mounting that allow circuit boards to be plugged together at right angles or end-to-end, or cables to be plugged onto circuits boards at right angles or end-on at the edge of the PCB. Both plugs and sockets may be butted up end-to-end to form connectors with any number of ways from 2 upwards.

Technical Information: Voltage: Current: Brass Crimp/Tin plated: Contact Resistance: 2.5A max. (solderable) 20mΩ max Dielectric Withstanding Voltage 1500VAC Insulation Resistance: 50MΩ 681g 3.63kg Contact insertion force Contact Retention to Housing Mating Force: Normal Force: 199g max

Qty 1+

\$0.50

\$0.55

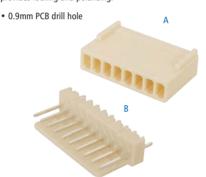
\$0.65

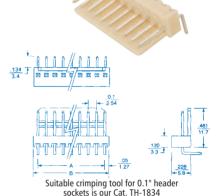
\$0.75

\$0.95

\$1.10

Both plugs are wafer design into which square, tin-plated brass pins have been inserted. These pins protrude 3.4 mm on one side, and should be soldered to the PCB. The nylon wafer sits on the PCB and is 3.3 mm thick. The back provides locking and polarising.





0.1" HEADER SOCKETS, LOCKING 0.1" PIN PLUG (STRAIGHT ENTRY

	(5.			
LOCKING 8	& POLA	RISED)	See photograph	"B'

7	Pins		Qty 1+	Qty 4+	Qty 10+
	2	HM-3412	\$0.20	\$0.18	\$0.16
	3	HM-3413	\$0.30	\$0.25	\$0.24
	4	HM-3414	\$0.40	\$0.35	\$0.30
	6	HM-3416	\$0.60	\$0.52	\$0.47
	8	HM-3418	\$0.80	\$0.70	\$0.62
	10	HM-3420	\$1.00	\$0.90	\$0.80

0.1" PIN PLUG (RIGHT ANGLE ENTRY,

LOCKING & POLARISED) See photograph "C"

7	Pins		Qty 1+	Qty 4+	Qty 10+
	2	HM-3422	\$0.30	\$0.25	\$0.24
	3	HM-3423	\$0.35	\$0.30	\$0.27
	4	HM-3424	\$0.40	\$0.35	\$0.30
	6	HM-3426	\$0.60	\$0.52	\$0.47
	8	HM-3428	\$0.80	\$0.70	\$0.62
	10	HM-3430	\$0.90	\$0.80	\$0.70

0.156" (4mm) Locking and Polarising Header Connectors

200g min UL 94v-0 White nylon

Qty 10+

\$0.40

\$0.42

\$0.50

\$0.60

\$0.75

\$0.85

0 to +75°C

Qty 4+

\$0.45

\$0.47

\$0.57

\$0.65

\$0.85

\$0.95

This range is similar to the range shown above, but much more robust. The contacts are rated at 250V @ 7A AC/DC which makes them an ideal power connector to a PCB. They are end to end stackable and commonly seen as the output connector on Switchmode power supplies.

& POLARISED See photograph "A"

HM-3402

HM-3403

HM-3404

HM-3406

HM-3408

HM-3410

Technical Information	
Voltage:	250V
Current:	7.0A
Contact Resistance:	20mΩ max
Dielectric Withstanding Voltage:	1500V
Insulation Resistance:	500k Ohm min
Contact Insertion Force:	2.28kg
Contact Retention to Housing:	4.56kg
Wire Pull-Out force:	2.85kg
Mating Force:	0.86kg
Unmating Force:	150g
Durability:	25 cycles
Housing:	Nylon, UL 94V-2
Temperature:	-40 to 105°C

0.156" (4MM) HEADER SOCKETS, **LOCKING & POLARISED**

(Includes crimp Pins)



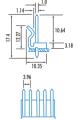
	mun	n d
Pins	Oty 1+	Otv 4+

7	Pins		Qty 1+	Qty 4+	Qty 10+		
	2	HM-3432	\$0.80	\$0.70	\$0.62		
	3	HM-3433	\$0.90	\$0.80	\$0.70		
	4	HM-3434	\$1.00	\$0.90	\$0.80		
	6	HM-3436	\$1.30	\$1.15	\$1.01		
	8	HM-3438	\$1.40	\$1.25	\$1.10		
	10	HM-3440	\$1.50	\$1.35	\$1.20		
Cri	Crimper to suit above Cat TH-1834						

0.156" (4MM) LOCKING & **POLARISED, STRAIGHT ENTRY PIN PLUG**

(To match previous headers).





_					
7	Pins		Qty 1+	Qty 4+	Qty 10+
	2	HM-3442	\$0.30	\$0.25	\$0.24
	3	HM-3443	\$0.35	\$0.30	\$0.27
	4	HM-3444	\$0.40	\$0.35	\$0.30
	6	HM-3446	\$0.60	\$0.52	\$0.47
	8	HM-3448	\$0.80	\$0.70	\$0.62
	10	HM-3450	\$0.90	\$0.80	\$0.70

HEADERS/ TERMINAL BLOCKS

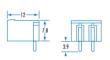
5.08mm High Quality Pluggable Terminal Blocks /Headers

Available in both horizontal-plug and vertical-plug versions, these quality headers simply solder to a PC board and are for the Pluggable Terminal Blocks (see below).

- Made from Polyamide66 plastic (UL94V-0) 1.0mm tin-plated brass solder pins
- Excellent current and insulation characteristics.



12A, 300VAC
2000VAC min
>5000MΩ 500VDC
1.5mm
5.08mm (0.200 inch)



The plug version to suit the above headers - these terminal blocks are easily plugged in, and feature nickel-plated brass cage clamps, tin-plated phosphor-bronze contacts, M3 nickel-plated steel screws.

HORIZONTAL PC MOUNT (PIC A)

Poles		Qty 1+	Qty 4+	Qty 10+
2	HM-3102	\$0.95	\$0.85	\$0.75
3	HM-3103	\$1.65	\$1.45	\$1.30
4	HM-3104	\$1.95	\$1.75	\$1.55
6	HM-3106	\$2.95	\$2.60	\$2.30
8	HM-3108	\$3.95	\$3.45	\$3.15

VERTICAL PC MOUNT PLUGGABLE HEADERS (PIC B)

7	Poles		Qty 1+	Qty 4+	Qty 10+
	2	HM-3112	\$0.95	\$0.85	\$0.75
	3	HM-3113	\$1.65	\$1.45	\$1.30
	4	HM-3114	\$1.95	\$1.75	\$1.55
	6	HM-3116	\$2.95	\$2.60	\$2.30
	8	HM-3118	\$3.95	\$3.45	\$3.15

SCREW TERMINAL SOCKETS (PIC C)

7	Poles	Width(A)mm		Qty 1+	Qty 4+	Qty 10+
	2	11.40	HM-3122	\$2.35	\$1.95	\$1.85
	3	16.40	HM-3123	\$3.60	\$3.15	\$2.75
	4	21.40	HM-3124	\$4.95	\$4.45	\$3.90
	6	31.40	HM-3126	\$6.95	\$6.25	\$5.50
	8	41.40	HM-3128	\$9.20	\$8.25	\$7.25

36 Way Pluggable PCB Connectors

Easy to use pluggable connector. Supplied as 36 way but can be easily separated into the number of contacts required.

• PCB mounting.

HM-3270 - 36 Way Female HM-3272 - 36 Way Male



7			Qty 1+	Qty 4+	Qty 10+
	Female	HM-3270	\$19.95	\$17.70	\$15.70
	Male	HM-3272	\$9.95	\$8.75	\$7.75

Terminal Strips

Still 12 way and capable of being divided with a sharp knife, however, the screw retention is much sturdier. Each terminal block has a mounting hole on a fixed pitch.

Specifications	
Material	Polyamide 66 (nylon)
UL94V-2 flame retardant	
Temperature	-35°C to 110°C
Voltage	250-450V
Colour	Natural

Current	Cable Dia	Length	Pitch		Qty 1+	Qty 4+	Qty 10+
5A	3.3mm	114.5mm	10mm	HM-3194	\$1.75	\$1.55	\$1.40
10A	4.2mm	128.8mm	11mm	HM-3196	\$1.95	\$1.75	\$1.55
15A	4.5mm	136.8mm	12mm	HM-3200	\$2.65	\$2.30	\$2.07
30A	5.6mm	164.5mm	15mm	HM-3198	\$2.85	\$2.53	\$2.23
60A	6.6mm	193mm	16.3mm	HM-3204	\$4.95	\$4.45	\$3.90

PCB Mount Screw Terminals - 5mm



Ideal for those situations where wires leave a PCB. Just solder the terminal strip to the PCB and connect wires. 2 way (HM-3172) and 3 way (HM-3173) are interlocking, so you can make up whatever size you require using these - see 6 way pictured.

7			Qty 1+	Qty 4+	Qty 10+	
	2 Way	HM-3172	\$1.20	\$1.05	\$0.95	
	3 Way	HM-3173	\$1.55	\$1.35	\$1.20	

Weidmuller PCB Mount Screw Terminals - 5.08mm

These are 5.08mm spacing, come in 2 and 3 way, are interlocking and orange in colour.







7		Qty 1+	Qty 4+	Qty 10+
2 Way	HM-3130	\$1.20	\$1.05	\$0.95
3 Way	HM-3132	\$1.55	\$1.35	\$1.20

Porcelain Terminal Blocks

Glazed porcelain terminal blocks are ideal for high temperature situations, such as in lighting. Ask us for competitive bulk prices.

Images not to scale



HM-3182 29(W)x22(D)x17(H)



HM-3183 30(L)x18(D)x16(H)mm



52(L)x29(D)x22(H)mm

7	Current	Voltage		Qty 1+	Qty 4+	Qty 10+
2 Wire Medium	10A	250VAC	HM-3182	\$0.85	\$0.75	\$0.65
3 Wire Small	5A	380VAC	HM-3183	\$0.85	\$0.75	\$0.65
3 Wire Large	30A	380VAC	HM-3185	\$1.35	\$1.20	\$1.05

Punchdown Block Connectors

For use with standard 110 punch down tools. PCB mounting.

• Two sizes available PT-5000 4 Way PT-5002 8 Way





7		Qty 1+	Qty 4+	Qty 10+
4 Way	PT-5000	\$1.95	\$1.75	\$1.55
8 Way	PT-5002	\$2.45	\$2.15	\$1.95

Plug/Socket Terminal Strip

Semi permanent connection up to 12 poles.

- Reliable screw down termination.
- 10A per pole.Supplied as a matching pair



7	Qty 1+	Qty 4+	Qty 10+
HM-320	2 \$12.95	\$11.35	\$10.35

PCB Pins & Sockets

0.9mm pins and sockets for easy termination of wire on PCB boards.

Gold flashed.





7	Pkt		Qty 1+	Qty 4+	Qty 10+
Pins	50	HP-1250	\$4.50	\$3.95	\$3.60
Pins	500	HP-1252	\$25.00	\$22.35	\$19.95
Sockets	25	HP-1260	\$5.50	\$4.90	\$4.30

CAR ANTENNA

Car Radio Antenna Line Plug

Solder type.
• Standard antenna plug



\$1.75

\$1.55

PP-2044

PP-2041

7	Qty 1+	Qty 10+	Qty 50+
PP-2040	\$1.65	\$1.45	\$1.30

Car Radio Socket Chassis Mount

Nickel plated



\$1.95

Car Radio Antenna Line Plugs

SOLDERLESS CAR RADIO ANTENNA LINE PLUG



Solder type with plastic strain relief.

7		Qty 1+	Qty 10+	Qty 50+
	PP-2044	\$2.95	\$2.60	\$2.30
	PP-2041	\$2.50	\$2.21	\$1.95

Solderless Car Radio Inline Socket

installation



Car Radio Antenna Adaptor Plug

Converts Motorola to European style antenna sockets.



Car Radio Antenna Adaptor Plug

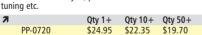
Converts European style antenna plug to Motorola style antenna plug.

7		Qty 1+	Qty 10+	Qty 50+
	PA-2038	\$4.95	\$4.45	\$3.90

SPECIAL APPLICATION

OBD II 16 Pin Connector

Most new cars sold in Australia have an OBD (On-Board Diagnostics) system. This connector interfaces with the current-standard 16 pin OBD-II socket for data analysis, performance tuning etc.



2 Pin 32 Volt Plugs & Sockets

For low voltage applications such as caravans etc up to 15amps.



\$8.95

\$7.95

\$6.95

AUTOMOTIVE

MERIT Plugs & Sockets

These are fast becoming the new standard in automotive power connectors. In fact, they have been used in some European bikes and cars for several years and are ideal when size and reliability of connection are important. Smaller in size than existing cigarette lighter connectors, they also have the advantage of a superior rugged construction and higher current carrying capability. The panel sockets feature a flip down cover to resist ingress of moisture and dust, and can withstand long periods of sustained current draw (unlike the el-cheapo versions of these connectors). We have even included a modular merit plug to cigarette lighter adaptor in our range for those people who need both styles in a single connector (like those used on popular brands of 4WD fridges and spotlights).

PP-2090 Unfused Merit Plug (15A)

PS-2092 Merit Panel Socket with Sprung cover (max 15A)
PP-2094 Merit Plug with Cigarette Lighter adaptor

(fused may 8A)

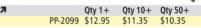
PS-2096 In-line Merit Socket with Cover (max 15A)



7		Qty 1+	Qty 10+	Qty 50+
	PP-2090	\$5.95	\$5.25	\$4.75
	PP-2094	\$6.95	\$6.25	\$5.50
	PS-2092	\$9.95	\$8.75	\$7.75
	PS-2096	\$6.95	\$6.25	\$5.50

Merit Plug to Cigarette Lighter Socket

Allows you to connect mobile phone chargers and other cigarette lighter plugged devices into vehicles equipped with a Merit socket.



MULTI-WAY CONNECTORS

Automotive Multi-Way Plug / Sockets - 250 Series

This range of connectors is commonly used in automotive applications such as stereo and CB installations, or for replacements in existing wiring. The housings interlock and they come in 2, 3, 4, 6 or 8 way sets. Each comes with plug, socket, and male and female locking spade lugs.



7		Qty 1+	Qty 10+	Qty 50+
2 Way	PP-2062	\$2.95	\$2.60	\$2.30
3 Way	PP-2064	\$3.45	\$3.05	\$2.75
4 Way	PP-2066	\$3.95	\$3.45	\$3.15
6 Way	PP-2068	\$4.95	\$4.45	\$3.90
8 Way	PP-2069	\$6.95	\$6.25	\$5.50

Pin Extraction Tool

Take the frustration out of removing Molex connector pins with these time save tools. Simply slide the tool over the connector and push the plunger to effortlessly remove the pin. Both male and female pin extractors available.



Automotive Waterproof Plug & Socket Sets

Waterproof automotive connectors commonly used on many modern cars for wiring connections within the engine bay and other areas that are exposed to moisture. The interlocking parts are surrounded by a rubber seal, while an individual grommet seals each

wire. Each package includes plug, socket, cable grommets and crimp pins.

Current rating: 20A (max.)

Pin spacing: 7.5mm

Assembled Length: 70mm

See page 180 for new range of connectors

7		Qty 1+	Qty 10+	Qty 50+
2 Way	PP-2110	\$7.95	\$6.95	\$6.25
3 Way	PP-2112	\$10.95	\$9.75	\$8.75
4 Way	PP-2114	\$16.95	\$14.95	\$13.35
6 Way	PP-2116	\$19.95	\$17.70	\$15.70

MULTI PIN (MOLEX)

Miniature Nylon MOLEX-Type Connectors

These connectors are suitable for high current/high density, wire-to-wire or wire-to-board applications. They are suitable for both power and signal connections.

- · Fully isolated terminals
- Positive housing locks
- · Four point of contact for reliability
- Low engagement force terminals
 Applications:
- Security and alarms
 Vending and gaming machine
 White goods
- Production equipment
- Broadcast equipmentTelecom infrastructure
- Male and female pins supplied

7	Cat.	Qty 1+	Qty 10+	Qty 50-
2 Pin	PP-2021	\$2.75	\$2.45	\$2.15
3 Pin	PP-2023	\$2.95	\$2.60	\$2.30
4 Pin	PP-2027	\$3.45	\$3.05	\$2.75
6 Pin	PP-2025	\$3.95	\$3.45	\$3.15

Multi Pin Plug / Socket

Each set consists of nylon body for male/female, along with male/female socket pins to fill all available poles. Will mate with standard MOLEX-type connectors



Sometimes called Soft Shell connectors

7		Qty 1+	Qty 10+	Qty 50+
2 Pole	PP-2020	\$2.75	\$2.45	\$2.15
3 Pole	PP-2022	\$2.95	\$2.60	\$2.30
6 Pole	PP-2024	\$3.95	\$3.45	\$3.15
12 Pole	PP-2026	\$6.95	\$6.25	\$5.50

Wired Multi Pin Plugs / Sockets

Heavy duty plug and socket with bullet type connectors.



18AWG wire.
Extremely handy when cables need to be periodically unplugged
Bullet style connectors



7		Qty 1+	Qty 10+	Qty 50+
2 Way	PP-2034	\$3.45	\$3.05	\$2.75
4 Way	PP-2030	\$8.95	\$7.95	\$6.95
6 Way	PP-2032	\$11.95	\$10.70	\$9.50

PP-2075

CIGARETTE LIGHTER PLUGS

3 Amp Lead With Bare Ends

Lead with a 3 amp fused cigarette lighter plug on one end. Internal fuse: 10A, 3AG

• Cable length: 450mm approx

Cable thickness: 18AWG

Surplus purchase



8 Amp Lead With Bare Ends

A lead consisting of an 8 amp fused cigarette lighter plug and 5 metres of thick cable.



7		Qty 1+	Qty 3+	Qty 6+	
3A	PP-1995	\$2.95	\$2.60	\$2.30	
8A	PP-1998	\$9.95	\$8.75	\$7.75	

Cigarette Lighter Plug

lighter socket to obtain 12VDC from the car battery.

· Economy grade



Cigarette Lighter Plug - Fused

As PP-2000 but with the added safety benefit of being fused. Supplied with 3A fuse.

Recommended

ECONOMY	Qty 1+	Qty 10+	Qty 50+	
PP-2000	\$1.65	\$1.45	\$1.30	
FUSED				
PP-2001	\$3.95	\$3.45	\$3.15	

Automotive cigarette lighter wiring rarely allows more than 15A to be taken from this circuit.

CIGARETTE LIGHTER ADAPTORS

Fused Cigarette Lighter Plug to

Has an internal fuse & LED power indicator

- Supplied with 3A, 3AG fuse
- Cable length 500mm

Surplus purchase

2.1mm DC Plug

Fused Cigarette Lighter Plug to 2.5mm DC Plug

Has an internal fuse and LED power indicator



Cable length 1.5 metres

7		Qty 1+	Qty 3+	Qty 6+
	PP-1993	\$2.95	\$2.60	\$2.30
	PP-1997	\$4.95	\$4.45	\$3.90

Cigarette Lighter Adaptor Cable

Contains no circuitry and allows you to power 12V devices from your car socket.



- 1.8m long
- LED power indicator. Supplied with 8 DC plugs. 2.35 x 0.75, 3.5 x 1.35, 4 x1.7, 5.5 x1.5, 5 x 2.1, 5.5 x 2.5, 2.5mm & 3.5mm. (OD first then ID)

7	Qty 1+	Qty 3+	Qty 6+
PP-1996	\$8.95	\$7.95	\$6.95

3 Metre Cigarette Lighter with Retractable Extension Cord

Rugged housing helps keeps the cord free from damage. Idea for four wheel drive use.

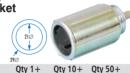
• 139(W) x 149(H) x 45(D)mm

Fuse: 5A

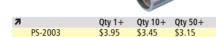
Qty 6+ Qty 3+ \$14.95

CIGARETTE LIGHTER SOCKETS

Cigarette Lighter **Chassis Socket**



Cigarette Lighter Inline Socket



ADAPTORS & LEADS

Cigarette Lighter Twin Socket

Allows you to run two 12V appliances from the one socket

• LED indicator

	Qty 1+	Qty 3+	Qty 6+	
PP-2005	\$9.95	\$8.75	\$7.75	

Cigarette Lighter Double Adaptor

Incorporates a lighter plug and two inline sockets

• 150mm cable

PP-1993

PP-1997

7	Qty 1+	Qty 3+	Qty 6+
PP-2006	\$9.95	\$8.75	\$7.75

Cigarette Lighter Extension Cord

Cigarette lighter extension cord with dust cover. Extend the range of your cigarette lighter devices

• Length: 3m

• Fuse: 5A

7	Qty 1+	Qty 3+	Qty 6+
PP-1992	\$12.95	\$11.35	\$10.35

Car Lighter Socket To Battery Clips

This lead simply clips onto car battery terminals and has a cigarette lighter socket on the other end.

· Cable length 400mm

Qty 10+ Qty 50+ PP-2007

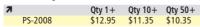
Under Dash Cigarette Lighter Socket With Protective Cap

This socket can be mounted under a car or boat dash and features a hinged cap with protective gasket. A convenient way of providing 12V on tap.

· Heavy duty auto cable

pre-attached • 450mm length.

Freecall order hotline: 1800 022 888



Under Dash Double Cigarette Lighter Socket

A dual socket mounted on a steel frame which in turn mounts under the dashboard. Heavy duty auto cable is included with in-line fuse holder and terminated with a bullet and Y connector.

- Lead length 300mm
- · Self tapping mounting screws included

7	Qty 1+	Qty 10+	Qty 50+
PS-2009	\$12.95	\$11.35	\$10.35

12VDC Cigarette Lighter **Socket 3 Way Splitter** with USB

This device converts one 12V socket into three to power all the gadgets you need as you drive, including a GPS and phone chargers.

The body rotates to the most convenient angle, and a USB port provides 5VDC power to power USB gadgets, including an iPhone®. Three built-in LEDs also indicate the status of your vehicles battery voltage.

- 12VDC adjustable plug 3 x 12VDC outputs
- 1 x 5VDC 500mA USB port
- Dimensions: 115(W) x 111(D) x 32(H)mm

7	Qty 1+	Qty 10+	Qty 50+
PS-2124	\$14.95	\$13.35	\$11.70

12VDC Car Cigarette Lighter Socket 4 Way Splitter with USB Port

Enables you to power up to four 12VDC plug appliances at once. You can plug in a laptop adaptor, a heated travel mug, a sine wave inverter, and a rechargeable LED torch. Plus it features a USB port to charge your iPhone® or other USB gadget.
Detachable mounting base so you can mount this unit horizontally or vertically on your dash or centre console, and detach it for flexible use

- 12VDC plug with 1.2m lead
 4 x 12VDC socket outputs / 1 x 5VDC 1A USB port
- 10A max

7	Qty 1+	Qty 3+	Qty 6+
PS-2019	\$19.95	\$17.70	\$15.70

Car Cigarette Lighter Socket with Lid

A handy additional power socket for charging devices in your car. This weatherproof 12V car cigarette lighter socket can be flush mounted and has a spring-loaded lid to keep it free of dust and debris.

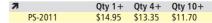
· Perfect for caravan, marine, 4WD or other harsher than normal applications.

Qty 4+ \$13.35 Qty 10+ PS-2015

Weatherproof Cigarette Lighter Socket - 15A

Suitable for marine, caravan, 4WD, camping or anywhere you need 12V power. Protected from the elements by a spring-loaded sealed cover and fully sealed electrical connection

- · 32mm mounting hole
- Flylead termination.



HIGH CURRENT CONNECTORS

Used widely in both domestic and industry, you'll find these connectors in many 4WD, boating, automotive and other industry

Anderson Powe applications. Supplied individually with a pair of contacts, all 5 current ratings have an operating temperature of -20° to $+120^{\circ}$ C.

Individual Nesting

They are genderless which means that there is no separate plug and socket and can be easily stacked to make custom configurations.



Specifications	PT-4405	PT-4407
Contact Rating	30A (max. 45A)	75A
Voltage	600V (AC or DC)	600 (AC or DC)
Contact Wire Size	1.63mm - 2.59mm	1.3mm - 13mm
	(#10-#14 AWG)	(#6 - #16AWG)
Max Wire Insulation Dia	4.4mm	1.3 - 13.3mm
Contact Retention Force	9kgs (20lbs)	22kgs (50lbs)
Operating Temperature	-40 to +125°C	-40 to +125°C

7		Qty 1+	Qty 10+	Qty 50+
30A	PT-4405	\$4.95	\$4.45	\$3.90
75A	PT-4407	\$11.95	\$10.70	\$9.50

Moulded Pair

industry, you'll find this connector in many 4WD applications, boating, automotive and other industries. Supplied as a moulded 2 pole with contacts.



Specifications	PT-4420	PT-4422	PT-4424
Contact Rating	50A	120A	175A
Contact Wire Size	13.3mm2	3.6mm2	53.5mm2
Contact wife size	(#6 AWG)	(#2 AWG)	(#1/0 AWG)
Voltage Rating	600V	600V	600V
, ,	(AC or DC)	(AC or DC)	(AC or DC)
Max Wire	11mm	14.6mm	19mm
Insulation Diameter	1 1 1111111	14.011111	1311111
Contact Retention	22kg	45.5kg	137kg
Force		(100lbs)	(300lbs)
Operating	-20 to	-20 to	-20 to
Temperature	+120°C	+125°C	+125°C
Anderson Part No.	SB50-6319	B120-6800G1	SB175-6325G1

7		Qty 1+	Qty 10+	Qty 50+
50A	PT-4420	\$9.95	\$8.75	\$7.75
120A	PT-4422	\$19.95	\$17.70	\$15.70
175A	PT-4424	\$29.95	\$26.90	\$23.70

Dust/Water Resistant Rubber Covers

A water and dust resistant

	ver to suit o type conne		20	5
Suits		Qty 1+	Qty 10+	Qty 50+
PT-4424	PM-4430	\$14.95	\$13.35	\$12.70
PT-4420	PM-4434	\$14.95	\$13.35	\$12.70

Dustcover for 120A Anderson Connectors

Rubber water and dust resistant cover for our 120A Anderson



PM-4434

PM-4430

connector	FIVI-4422.			
Suits		Qty 1+	Qty 10+	Qty 50+
PT-4422	PM-4432	\$14 95	\$13.35	\$12.70

Handles for Anderson Connectors

Facilitates easy connection/ disconnection. Ensures a secure grip, even with gloved hands for easier charging of electric forklifts etc.

Suits Anderson Connector 50A Cat PT-4420 120A Cat. PT-4422 Cat PM-4436 Cat PM-4438 175A Cat. PT-4424 Cat PM-4439

Suits		Qty 1+	Qty 10+	Qty 50+
PT-4420	PM-4436	\$7.95	\$6.95	\$6.75
PT-4422	PM-4438	\$7.95	\$6.95	\$6.75
PT-4424	PM-4439	\$12.95	\$11.35	\$10.95

4mm Banana Socket to Alligator Clip Available in black or red



7		Qty 1+	Qty 10+	Qty 50+
Red	PA-3668	\$2.75	\$2.45	\$2.15
Black	PA-3669	\$2.75	\$2.45	\$2.15

Cat III Rated Banana Alligator Clip

Takes standard and fully insulated 4mm banana plugs and turns them into an alligator clip.

 CATIII rated Sold as a pair, red and black

7		Qty 1+	Qty 10+	Qty 50+
	PA-3696	\$9.95	\$8.75	\$7.75

Alligator Clips

SMALL - 26mm

1 x Red	& 1 x Black	Qty 1+	Qty 10+	Qty 50+
Pair	HM-3020	\$1.50	\$1.35	\$1.20
MEDIUI	VI - 32mm			
1 x Red	& 1 x Black	Qty 1+	Qty 10+	Qty 50+
Pair	HM-3022	\$1.95	\$1.75	\$1.55

Alligator Clips With Screw

No soldering required. Large alligator clips with plastic finger grips and a screw for connection.

- Length 55mm
- Max jaw opening 12mm · Sold as a pair or singly
- 1 x Red & 1 x Black Qty 10+ Qty 50+

Pair HM-3025 \$2.45 \$2.15 \$1.95

Jumper Lead Kits

HEAVY DUTY

This kit has large alligator clips and heavy cable. The alligator clips are approximately 50mm long, and have jaw openings of about 10mm.

Cable length is approx 300mr 10 leads supplied, 2 of each colour.



Ideal for connecting devices for testing. Alligator clip size is approx 40mm, jaw opening is about 8mm and cable length is approx 400mm.

10 leads supplied 2 of each colour.

HEAVY DUTY	Qty 1+	Qty 10+	Qty 50+
WC-6020	\$11.95	\$10.70	\$9.50
STANDARD			
WC-6010	\$6.95	\$6.25	\$5.35

Car Battery Type Clips

Connectors - Alligator

All have insulated colour coded handles.



400 AMP

These are very large and very strong. You can not put your finger in the end, because it will probably give you a bite! These are ideal for





15 AM	P Length 55mm.	Max jaw	opening 14	mm
1 x Red	d & 1 x Black	Qty 1+	Qty 10+	Qty 50+
Pair	HM-3010	\$3.50	\$3.15	\$2.75

30 AM	IP Length 70m	ım. Max jaw	opening 2	0mm
1 x Rec	& 1 x Black	Qty 1+	Qty 10+	Qty 50+
Pair	HM-3012	\$3.95	\$3.45	\$3.15

50 AM	IP Length 98mm.	. Max jaw	opening 25	mm
1 x Rec	l & 1 x Black	Qty 1+	Qty 10+	Qty 50+
Pair	HM-3015	\$5.50	\$4.90	\$4.30

200 F	amp Lengtn i	30mm. iviax	jaw opening	35MM
7		Qty 1+	Qty 10+	Qty 50+
Pair	HM-3060	\$9.95	\$8.75	\$7.75

400 Amp Length	155mm. Ma	ax jaw opening	22mm
71	Otv 1+	Otv 10+	Otv 50+

7		Qty 1+	Qty 10+	Qty 50+
Pair	HM-3085	\$15.95	\$14.35	\$12.70

400 Amp Stainless Steel **Battery Clamps**

Rated at 400 amps this pair of heavy duty battery clamps are ideal for making up jumper leads and for use with our inverters. All metal parts are made from 316 marine grade stainless steel, they can be taken

and used anywhere without the risk of corrosion.

- Sold per pair Current rating: 400 amps
- Length 165mm
- Max jaw opening 50mm316 Grade (marine grade)

stainless steel



Waterproof Cable **Connector Housing**

electrical cables and provide a robust and waterproof connection



This housing will also accomodate any connector which is sized within the internal dimensions of the housing. Note: cable not included.

Specifications								
Operating Temp	-20°C to +75°C							
Ingress Protection	IP68							
Voltage Rating	250V (for i	ncluded termi	nal block)					
Current Rating	16A max (for included terminal block)							
Accepted Cable Types	Circular sheath with 6 - 10mm dia							
7	Qty 1+	Qty 10+	Qty 50+					
PS-4068	\$29.95	\$26.90	\$25.45					

If you are reading this page you may have application for high-current wiring. For suitable heavy-duty cable check out pages 207 for cable down to "0" gauge. You might also find the automotive cabling hardware and fuses on page 207 interesting.

Cable – Screened Audio & Video

SCREENED AUDIO & VID	EO CAI	BLE							
Figure 8 Twin Screened								10	0 metre roll
2 grey PVC covered individually screene	ed conducto	rs. Screens electrica	Illy separated.						o metre ron
		PVC	Grey			7 Cat.	Per Metre	1+ Rolls	5+ Rolls
	00	AWG	23			WB-1502	\$1.00	\$85.00	\$65.00
Single Screened Audio								10	0 metre roll
Single screened PVC covered, light du	uty cable.		ds, small microphor 23	ies, amplifier w	ring, etc. Grey in col			4 . 5 !!	"
	- ()	AWG	23	-		7 Cat. WB-1500	Per Metre \$0.55	1+ Rolls \$45.00	5+ Rolls \$35.00
								T 12122	,
Single Core OFC Screened								10	0 metre roll
High quality OFC mono audio cable,	double scr	eened for extra sh	ielding. Ideal for ma	king your own	RCA leads.				
		Conductor/Insul: Braid:	OFC/PPE 96/0.10 + Alum	Impedance:	65Ω@1m				
100 E/Se	\blacksquare (\bigcirc)	Capacitance:	66.8pF/m	Stranding: Conductor Res	45/0.12mm is: 0.0365Ω/M	7 Cat. WB-1508	Per Metre \$2.35	1+ Rolls \$195.00	5+ Rolls \$170.00
		AWG	22		'	WB-1300	\$2.55	\$133.00	\$170.00
2 Core Round								10	0 metre roll
Twin screened pair (not balanced). Er	nclosed in	a thick wall PVC ia	icket. 0.127/7 + 0.1	12/40				10	
	-	AWG	23			7 Cat.	Per Metre	1+ Rolls	5+ Rolls
	_ (00)					WB-1504	\$0.90	\$67.00	\$55.00
4 Core Round								10	0 metre roll
4 conductors each screened and enca		PVC covering. Ide	eal for DIN plug and	I socket wiring.	Screens electrically of				
No. of Contract of	-	AWG	23	-		7 Cat. WB-1510	Per Metre		5+ Rolls \$80.00
						VIC1-0 VV	\$1.30	\$105.00	ψου.υυ
Figure 8 OFC Screened Audio								Δ() metre roll
High quality audio cable. As used on	our best le	eads.						-	
		Inner conductor:		Screen:		m foil longitudal wr	apped shield		
	00	Braid:	0.12mm/6 x 16 tinned OFC copp	Outer er dia/Insulato	6mm / FPE r: Red & White	7 Cat. WB-1506	Per Metre \$3.60	1+ Rolls \$120.00	5+ Rolls \$100.00
		AWG	23			VVD-1300	\$5.00	\$120.00	\$100.00
Figure 8 OFC Double Screened	+ Cent	ral Lead Wire						10	0 metre roll
Ideal for running audio line level cabl	les from o	ne end of the car t	o the other. The dou	ıble screens jus	about eliminate all	interference.		10	o mede ron
The central lead wire is used to remo	tely turn a	mplifiers on.							
		Sizo	12 v 5mm	Braid:	16 v 6/0 12mm	Impedance:	650 @ 1M	1H2	
The later of		Size Conductor / Ins:	12 x 5mm OFC/PPE	Braid: Cond Resis:	16 x 6/0.12mm 0.0366Ω/m@20°C	Impedance:	65Ω @ 1N		E i Della
The same of the sa	000	Conductor / Ins: Stranding:	OFC/PPE 45/0.12mm	Cond Resis: Capcitance:	0.0366Ω/m@20°C 67.0pF/m			1+ Rolls \$260.00	5+ Rolls \$230.00
Salarian Control of the Control of t	000	Conductor / Ins:	OFC/PPE	Cond Resis:	0.0366Ω/m@20°C	7 Cat.	Per Metre	1+ Rolls	
Professional VGA Cable		Conductor / Ins: Stranding: AWG	OFC/PPE 45/0.12mm 20	Cond Resis: Capcitance: Colour	0.0366Ω/m@20°C 67.0pF/m Red	7 Cat. WB-1509	Per Metre \$3.30	1+ Rolls \$260.00	\$230.00 metre roll
Professional VGA Cable VGA cable suitable for installations or		Conductor / Ins: Stranding: AWG	OFC/PPE 45/0.12mm 20	Cond Resis: Capcitance: Colour	0.0366Ω/m@20°C 67.0pF/m Red	7 Cat. WB-1509	Per Metre \$3.30	1+ Rolls \$260.00	\$230.00 metre roll
		Conductor / Ins: Stranding: AWG	oFC/PPE 45/0.12mm 20 in AV rooms, comp	Cond Resis: Capcitance: Colour	0.0366Ω/m@20°C 67.0pF/m Red	7 Cat. WB-1509	Per Metre \$3.30	1+ Rolls \$260.00	\$230.00 • metre roll at. PT-0476.
		Conductor / Ins: Stranding: AWG s, TVs or monitors RGB Conductors: Center	in AV rooms, comp	Cond Resis: Capcitance: Colour uter, conference Sync / other	0.0366Ω/m@20°C 67.0pF/m Red or training rooms e 7 x 0.2mm	7 Cat. WB-1509	Per Metre \$3.30 used with VGA	1+ Rolls \$260.00 30 Wall Plate C	\$230.00 • metre roll at. PT-0476.
		Conductor / Ins: Stranding: AWG s, TVs or monitors RGB Conductors:	in AV rooms, comp 7 x 0.127mm tinned copper 1.60mm foam PE	Cond Resis: Capcitance: Colour uter, conference Sync / other conductors: Jacket:	0.0366Ω/m@20°C 67.0pF/m Red or training rooms e 7 x 0.2mm tinned copper 1.1mm PVC	Cat. WB-1509 ttc. Intended to be u Braiding:	Per Metre \$3.30 used with VGA	1+ Rolls \$260.00 30 Wall Plate Comm tinned co	\$230.00 • metre roll at. PT-0476.
		Conductor / Ins: Stranding: AWG s, TVs or monitors: RGB Conductors: Center Conductor:	in AV rooms, comp 7 x 0.127mm tinned copper 1.60mm foam PE 40x0.12mm	Cond Resis: Capcitance: Colour uter, conference Sync / other conductors: Jacket:	0.0366Ω/m@20°C 67.0pF/m Red or training rooms e 7 x 0.2mm tinned copper 1.1mm PVC 30 x 0.03mm	Cat. WB-1509 ttc. Intended to be u Braiding: Jacket: AWG	Per Metre \$3.30 used with VGA 192 x 0.12r 8.1mm PVC 28	1+ Rolls \$260.00 30 Wall Plate C mm tinned co	\$230.00 metre roll at. PT-0476.
		Conductor / Ins: Stranding: AWG s, TVs or monitors RGB Conductors: Center Conductor: Dielectric: Braiding:	in AV rooms, comp 7 x 0.127mm tinned copper 1.60mm foam PE 40x0.12mm tinned copper	Cond Resis: Capcitance: Colour uter, conference Sync / other conductors: Jacket: Shielding: Screen:	0.0366Ω/m@20°C 67.0pF/m Red or training rooms e 7 x 0.2mm tinned copper 1.1mm PVC 30 x 0.03mm Al foil 7 x 0.2mm	tc. Intended to be u Braiding: Jacket: AWG	Per Metre \$3.30 ssed with VGA 192 x 0.12r 8.1mm PVC 28 1+ Rolls	1+ Rolls \$260.00 30 Wall Plate C mm tinned co UL94 VW-1 4+ Rolls	\$230.00 metre roll at. PT-0476. ppper 10+ Rolls
		Conductor / Ins: Stranding: AWG s, TVs or monitors: RGB Conductors: Center Conductor: Dielectric:	in AV rooms, comp 7 x 0.127mm tinned copper 1.60mm foam PE 40x0.12mm	Cond Resis: Capcitance: Colour uter, conference Sync / other conductors: Jacket: Shielding:	0.0366Ω/m@20°C 67.0pF/m Red or training rooms e 7 x 0.2mm tinned copper 1.1mm PVC 30 x 0.03mm Al foil	Cat. WB-1509 ttc. Intended to be u Braiding: Jacket: AWG	Per Metre \$3.30 used with VGA 192 x 0.12r 8.1mm PVC 28	1+ Rolls \$260.00 30 Wall Plate C mm tinned co	\$230.00 metre roll at. PT-0476.
VGA cable suitable for installations of		Conductor / Ins: Stranding: AWG s, TVs or monitors RGB Conductors: Center Conductor: Dielectric: Braiding:	in AV rooms, comp 7 x 0.127mm tinned copper 1.60mm foam PE 40x0.12mm tinned copper	Cond Resis: Capcitance: Colour uter, conference Sync / other conductors: Jacket: Shielding: Screen:	0.0366Ω/m@20°C 67.0pF/m Red or training rooms e 7 x 0.2mm tinned copper 1.1mm PVC 30 x 0.03mm Al foil 7 x 0.2mm	tc. Intended to be u Braiding: Jacket: AWG	Per Metre \$3.30 ssed with VGA 192 x 0.12r 8.1mm PVC 28 1+ Rolls	1+ Rolls \$260.00 30 Wall Plate Comm tinned co UL94 VW-1 4+ Rolls \$71.95	\$230.00 metre roll at. PT-0476. ppper 10+ Rolls \$61.95
VGA cable suitable for installations of the suitable for installations of	of projector	Conductor / Ins: Stranding: AWG s, TVs or monitors RGB Conductors: Center Conductor: Dielectric: Braiding: Jacket:	in AV rooms, comp 7 x 0.127mm tinned copper 1.60mm foam PE 40x0.12mm tinned copper 2.5mm PVC	Cond Resis: Capcitance: Colour uter, conference Sync / other conductors: Jacket: Shielding: Screen: Drain:	0.0366Ω/m@20°C 67.0pF/m Red or training rooms e 7 x 0.2mm tinned copper 1.1mm PVC 30 x 0.03mm Al foil 7 x 0.2mm tinned copper	tc. Intended to be u Braiding: Jacket: AWG Cat. WB-1572	Per Metre \$3.30 ssed with VGA 192 x 0.12r 8.1mm PVC 28 1+ Rolls \$79.95	1+ Rolls \$260.00 30 Wall Plate Comm tinned co C UL94 VW-1 4+ Rolls \$71.95	\$230.00 metre roll at. PT-0476. opper 10+ Rolls \$61.95 0 metre roll
VGA cable suitable for installations of Professional RGB Video Cable	of projector	Conductor / Ins: Stranding: AWG s, TVs or monitors: RGB Conductors: Center Conductor: Dielectric: Braiding: Jacket:	in AV rooms, comp 7 x 0.127mm tinned copper 1.60mm foam PE 40x0.12mm tinned copper 2.5mm PVC	Cond Resis: Capcitance: Colour uter, conference Sync / other conductors: Jacket: Shielding: Screen: Drain:	on training rooms e or training rooms e 7 x 0.2mm tinned copper 1.1mm PVC 30 x 0.03mm Al foil 7 x 0.2mm tinned copper	tc. Intended to be u Braiding: Jacket: AWG Cat. WB-1572	Per Metre \$3.30 ssed with VGA 192 x 0.12r 8.1mm PVC 28 1+ Rolls \$79.95	1+ Rolls \$260.00 30 Wall Plate Comm tinned co C UL94 VW-1 4+ Rolls \$71.95	\$230.00 metre roll at. PT-0476. opper 10+ Rolls \$61.95 0 metre roll
VGA cable suitable for installations or Professional RGB Video Cable This is a RGB video cable with 3 screen	of projector	Conductor / Ins: Stranding: AWG s, TVs or monitors RGB Conductors: Center Conductor: Dielectric: Braiding: Jacket:	in AV rooms, comp 7 x 0.127mm tinned copper 1.60mm foam PE 40x0.12mm tinned copper 2.5mm PVC	Cond Resis: Capcitance: Colour uter, conference: Sync / other conductors: Jacket: Shielding: Screen: Drain: e cable insulatic required. Insulator: 3.	0.0366Ω/m@20°C 67.0pF/m Red or training rooms e 7 x 0.2mm tinned copper 1.1mm PVC 30 x 0.03mm Al foil 7 x 0.2mm tinned copper	Cat. WB-1509 ttc. Intended to be u Braiding: Jacket: AWG Cat. WB-1572	Per Metre \$3.30 ssed with VGA 192 x 0.12r 8.1mm PVC 28 1+ Rolls \$79.95	1+ Rolls \$260.00 30 Wall Plate Comm tinned co C UL94 VW-1 4+ Rolls \$71.95	\$230.00 metre roll at. PT-0476. opper 10+ Rolls \$61.95 0 metre roll
VGA cable suitable for installations of the suitable for installations of	ened cable	Conductor / Ins: Stranding: AWG s, TVs or monitors: RGB Conductors: Center Conductor: Dielectric: Braiding: Jacket: ss for red, green ar individual compos Inner Cond:	in AV rooms, comp 7 x 0.127mm tinned copper 1.60mm foam PE 40x0.12mm tinned copper 2.5mm PVC	cond Resis: Capcitance: Colour uter, conference Sync / other conductors: Jacket: Shielding: Screen: Drain: e cable insulation required. Insulator: 3. Braid: 0.	0.0366Ω/m@20°C 67.0pF/m Red or training rooms e 7 x 0.2mm tinned copper 1.1mm PVC 30 x 0.03mm Al foil 7 x 0.2mm tinned copper on is colour coded ar 1mm FPE coloured 12mm/6 x 16 tinned pF/m between	Tacket: AWG Cat. WB-1509 AWG Cat. WB-1572 AWG Cat. WB-1572 AG suitable for video	Per Metre \$3.30 ssed with VGA 192 x 0.12r 8.1mm PVC 28 1+ Rolls \$79.95	1+ Rolls \$260.00 30 Wall Plate Comm tinned co C UL94 VW-1 4+ Rolls \$71.95	\$230.00 metre roll at. PT-0476. opper 10+ Rolls \$61.95 0 metre roll
VGA cable suitable for installations or Professional RGB Video Cable This is a RGB video cable with 3 screen	of projector	Conductor / Ins: Stranding: AWG s, TVs or monitors: RGB Conductors: Center Conductor: Dielectric: Braiding: Jacket: ss for red, green ar individual compos Inner Cond: Screen:	in AV rooms, comp 7 x 0.127mm tinned copper 1.60mm foam PE 40x0.12mm tinned copper 2.5mm PVC and blue video. Insidite video signals if 0.12mm OFC 14mm alumin foi	cond Resis: Capcitance: Colour uter, conference Sync / other conductors: Jacket: Shielding: Screen: Drain: e cable insulation required. Insulator: 3. Braid: 0.	0.0366Ω/m@20°C 67.0pF/m Red or training rooms e 7 x 0.2mm tinned copper 1.1mm PVC 30 x 0.03mm Al foil 7 x 0.2mm tinned copper	Cat. WB-1509 ttc. Intended to be u Braiding: Jacket: AWG Cat. WB-1572	Per Metre \$3.30 used with VGA 192 x 0.12r 8.1mm PVC 28 1 + Rolls \$79.95	1+ Rolls \$260.00 30 Wall Plate Comm tinned co C UL94 VW-1 4+ Rolls \$71.95 5 a cable is 6mm	\$230.00 metre roll at. PT-0476. apper 10+ Rolls \$61.95 0 metre roll n diameter.
Professional RGB Video Cable This is a RGB video cable with 3 scree Individual conductors can be split and	ened cable	Conductor / Ins: Stranding: AWG s, TVs or monitors: RGB Conductors: Center Conductor: Dielectric: Braiding: Jacket: s for red, green ar individual compos Inner Cond: Screen: Jacket:	in AV rooms, comp 7 x 0.127mm tinned copper 1.60mm foam PE 40x0.12mm tinned copper 2.5mm PVC and blue video. Insidiste video signals if 0.12mm OFC 14mm alumin foi PVC 6 x 18mm	cond Resis: Capcitance: Colour uter, conference Sync / other conductors: Jacket: Shielding: Screen: Drain: e cable insulation required. Insulator: 3. Braid: 0.	0.0366Ω/m@20°C 67.0pF/m Red or training rooms e 7 x 0.2mm tinned copper 1.1mm PVC 30 x 0.03mm Al foil 7 x 0.2mm tinned copper on is colour coded ar 1mm FPE coloured 12mm/6 x 16 tinned pF/m between	Tacket: AWG Cat. WB-1509 AWG Cat. WB-1572 AWG Cat. WB-1572 AG suitable for video	Per Metre \$3.30 used with VGA 192 x 0.12r 8.1mm PVC 28 1+ Rolls \$79.95 o signals. Each	1+ Rolls \$260.00 30 Wall Plate Comm tinned co C UL94 VW-1 4+ Rolls \$71.95 5 cable is 6mm 1+ Rolls \$215.00	\$230.00 metre roll at. PT-0476. opper 10+ Rolls \$61.95 0 metre roll n diameter. 5+ Rolls \$180.00
Professional RGB Video Cable This is a RGB video cable with 3 scree Individual conductors can be split and	ened cabled dused for	Conductor / Ins: Stranding: AWG s, TVs or monitors RGB Conductors: Center Conductor: Dielectric: Braiding: Jacket: ss for red, green ar individual compos Inner Cond: Screen: Jacket: AWG	in AV rooms, comp 7 x 0.127mm tinned copper 1.60mm foam PE 40x0.12mm tinned copper 2.5mm PVC and blue video. Insidite video signals if 0.12mm oFC 14mm alumin foi PVC 6 x 18mm 23	cond Resis: Capcitance: Colour uter, conference Sync / other conductors: Jacket: Shielding: Screen: Drain: required. Insulator: 3. Braid: 0. Capacitance: 75. Cc	0.0366Ω/m@20°C 67.0pF/m Red or training rooms e 7 x 0.2mm tinned copper 1.1mm PVC 30 x 0.03mm Al foil 7 x 0.2mm tinned copper on is colour coded ar 1mm FPE coloured 12mm/6 x 16 tinned pF/m between inductor & screen	Cat. WB-1509 Act. Intended to be use Braiding: Jacket: AWG Cat. WB-1572 Act. WB-1572 Cat. WB-1579	Per Metre \$3.30 192 x 0.12r 8.1mm PVC 28 1+ Rolls \$79.95 o signals. Each	1+ Rolls \$260.00 30 Wall Plate Comm tinned co C UL94 VW-1 4+ Rolls \$71.95 5 cable is 6mm 1+ Rolls \$215.00	\$230.00 metre roll at. PT-0476. opper 10+ Rolls \$61.95 0 metre roll n diameter.
Professional RGB Video Cable This is a RGB video cable with 3 scree Individual conductors can be split and	ened cabled dused for	Conductor / Ins: Stranding: AWG s, TVs or monitors RGB Conductors: Center Conductor: Dielectric: Braiding: Jacket: ss for red, green ar individual compos Inner Cond: Screen: Jacket: AWG	in AV rooms, comp 7 x 0.127mm tinned copper 1.60mm foam PE 40x0.12mm tinned copper 2.5mm PVC ad blue video. Inside site video signals if 0.12mm OFC 14mm alumin foi PVC 6 x 18mm 23 This is the same cab 1.5mm FPE white	cond Resis: Capcitance: Colour uter, conference Sync / other conductors: Jacket: Shielding: Screen: Drain: e cable insulatic required. Insulator: 3. Braid: 0. Capacitance: co	0.0366Ω/m@20°C 67.0pF/m Red or training rooms e 7 x 0.2mm tinned copper 1.1mm PVC 30 x 0.03mm Al foil 7 x 0.2mm tinned copper on is colour coded ar 1mm FPE coloured 12mm/6 x 16 tinned ipF/m between inductor & screen	Cat. WB-1509 Act. Intended to be use Braiding: Jacket: AWG Cat. WB-1572 Act. WB-1572 Cat. WB-1559 Es. Ideal for home comes	Per Metre \$3.30 192 x 0.12r 8.1mm PVC 28 1+ Rolls \$79.95 o signals. Each	1+ Rolls \$260.00 30 Wall Plate Comm tinned co C UL94 VW-1 4+ Rolls \$71.95 5 cable is 6mm 1+ Rolls \$215.00	\$230.00 metre roll at. PT-0476. opper 10+ Rolls \$61.95 0 metre roll n diameter. 5+ Rolls \$180.00
Professional RGB Video Cable This is a RGB video cable with 3 scree Individual conductors can be split and	ened cabled dused for	Conductor / Ins: Stranding: AWG s, TVs or monitors: RGB Conductors: Center Conductor: Dielectric: Braiding: Jacket: s for red, green ar individual compos Inner Cond: Screen: Jacket: AWG	in AV rooms, comp 7 x 0.127mm tinned copper 1.60mm foam PE 40x0.12mm tinned copper 2.5mm PVC and blue video. Insidiste video signals if 0.12mm OFC 14mm alumin foi PVC 6 x 18mm 23 This is the same cab 1.5mm FPE white PVC 6.5 dia non	cond Resis: Capcitance: Colour uter, conference: Sync/ other conductors: Jacket: Shielding: Screen: Drain: e cable insulation: Insulator: Capacitance: Color Screen: Capacitance: Color Capacitance: Color Capacitance: Color Capacitance: Color Capacitance: Ca	0.0366Ω/m@20°C 67.0pF/m Red or training rooms e 7 x 0.2mm tinned copper 1.1mm PVC 30 x 0.03mm Al foil 7 x 0.2mm tinned copper on is colour coded ar 1mm FPE coloured 12mm/6 x 16 tinned ipF/m between nductor & screen r S-Video video cable 1.1mm x 46 OFC spir. 5 pF/m between	Cat. WB-1509 tc. Intended to be use a graiding: Jacket: AWG Cat. WB-1572 d suitable for video OFC Cat. WB-1559 es. Ideal for home coal	Per Metre \$3.30 192 x 0.12r 8.1mm PVC 28 1 + Rolls \$79.95 0 signals. Each Per Metre \$5.15	1+ Rolls \$260.00 30 Wall Plate Comm tinned community 4+ Rolls \$71.95 50 Cable is 6min 1+ Rolls \$215.00 10 1+ Rolls	\$230.00 metre roll at. PT-0476. opper 10 + Rolls \$61.95 0 metre roll n diameter. 5 + Rolls \$180.00 0 metre roll 5 + Rolls
Professional RGB Video Cable This is a RGB video cable with 3 scree Individual conductors can be split and	ened cabled d used for	Conductor / Ins: Stranding: AWG s, TVs or monitors RGB Conductors: Center Conductor: Dielectric: Braiding: Jacket: s for red, green ar individual compos Inner Cond: Screen: Jacket: AWG	in AV rooms, comp 7 x 0.127mm tinned copper 1.60mm foam PE 40x0.12mm tinned copper 2.5mm PVC 1.60mm foam PE 1.60mm foam FE 1	cond Resis: Capcitance: Colour uter, conference: Sync / other conductors: Jacket: Shielding: Screen: Drain: required. Insulator: 3. Braid: 0. Capacitance: 7. Capacitance: 0. Capacitance: 0	0.0366Ω/m@20°C 67.0pF/m Red or training rooms e 7 x 0.2mm tinned copper 1.1mm PVC 30 x 0.03mm Al foil 7 x 0.2mm tinned copper on is colour coded ar 1mm FPE coloured 12mm/6 x 16 tinned 6pF/m between inductor & screen	Cat. WB-1509 Act. Intended to be use Braiding: Jacket: AWG Cat. WB-1572 Act. WB-1572 Cat. WB-1559 Cat. WB-1559	Per Metre \$3.30 192 x 0.12r 8.1mm PVC 28 1 + Rolls \$79.95 o signals. Each Per Metre \$5.15	1+ Rolls \$260.00 30 Wall Plate Comm tinned community 4+ Rolls \$71.95 50 Cable is 6mm 1+ Rolls \$215.00	\$230.00 metre roll at. PT-0476. opper 10 + Rolls \$61.95 0 metre roll n diameter. 5 + Rolls \$180.00 10 metre roll
Professional RGB Video Cable This is a RGB video cable with 3 screen Individual conductors can be split and Professional S-Video High Quality cable for video. S-Video	ened cabled d used for	Conductor / Ins: Stranding: AWG s, TVs or monitors RGB Conductors: Center Conductor: Dielectric: Braiding: Jacket: s for red, green ar individual compos Inner Cond: Screen: Jacket: AWG mini DIN plugs. T Insulator: Outer Jacket:	in AV rooms, comp 7 x 0.127mm tinned copper 1.60mm foam PE 40x0.12mm tinned copper 2.5mm PVC and blue video. Insidite video signals if 0.12mm oFC 14mm alumin foi PVC 6 x 18mm 23 This is the same cab 1.5mm FPE white PVC 6.5 dia non migration	cond Resis: Capcitance: Colour uter, conference: Sync / other conductors: Jacket: Shielding: Screen: Drain: required. Insulator: 3. Braid: 0. Capacitance: 7. Capacitance: 0. Capacitance: 0	0.0366Ω/m@20°C 67.0pF/m Red or training rooms e 7 x 0.2mm tinned copper 1.1mm PVC 30 x 0.03mm Al foil 7 x 0.2mm tinned copper on is colour coded ar 1mm FPE coloured 12mm/6 x 16 tinned 6pF/m between inductor & screen	Cat. WB-1509 tc. Intended to be use a graiding: Jacket: AWG Cat. WB-1572 d suitable for video OFC Cat. WB-1559 es. Ideal for home coal	Per Metre \$3.30 192 x 0.12r 8.1mm PVC 28 1 + Rolls \$79.95 0 signals. Each Per Metre \$5.15	1+ Rolls \$260.00 30 Wall Plate Comm tinned community 4+ Rolls \$71.95 50 Cable is 6min 1+ Rolls \$215.00 10 1+ Rolls	\$230.00 metre roll at. PT-0476. opper 10+ Rolls \$61.95 0 metre roll n diameter. 5+ Rolls \$180.00 0 metre roll 5+ Rolls \$120.00
Professional RGB Video Cable This is a RGB video cable with 3 screen Individual conductors can be split and Professional S-Video High Quality cable for video. S-Video High Quality S-Video & Audio	ened cabled dused for	Conductor / Ins: Stranding: AWG s, TVs or monitors: RGB Conductors: Center Conductor: Dielectric: Braiding: Jacket: s for red, green ar individual compos Inner Cond: Screen: Jacket: AWG mini DIN plugs. T Insulator: Outer Jacket: Inner conduct:	in AV rooms, comp 7 x 0.127mm tinned copper 1.60mm foam PE 40x0.12mm tinned copper 2.5mm PVC ad blue video. Inside site video signals if 0.12mm OFC 14mm alumin foi PVC 6 x 18mm 23 This is the same cab 1.5mm FPE white PVC 6.5 dia non migration 0.12mm x 7 OFC	cond Resis: Capcitance: Colour uter, conference: Sync / other conductors: Jacket: Shielding: Screen: Drain: e cable insulation required. Insulator: Capacitance: Capacitance	0.0366Ω/m@20°C 67.0pF/m Red or training rooms e 7 x 0.2mm tinned copper 1.1mm PVC 30 x 0.03mm Al foil 7 x 0.2mm tinned copper on is colour coded ar 1mm FPE coloured 12mm/6 x 16 tinned ipF/m between inductor & screen r S-Video video cable 1.1mm x 46 OFC spirt 5 pF/m between onductor and shield 8	Cat. WB-1509 ttc. Intended to be use a graining: Jacket: AWG Cat. WB-1572 The Cat. WB-1579 Cat. WB-1559 The Cat. WB-1559 The Cat. WB-1556	Per Metre \$3.30 192 x 0.12r 8.1mm PVC 28 1 + Rolls \$79.95 0 signals. Each Per Metre \$5.15	1+ Rolls \$260.00 30 Wall Plate Comm tinned community 4+ Rolls \$71.95 50 Cable is 6min 1+ Rolls \$215.00 10 1+ Rolls	\$230.00 metre roll at. PT-0476. opper 10 + Rolls \$61.95 0 metre roll n diameter. 5 + Rolls \$180.00 0 metre roll 5 + Rolls
Professional RGB Video Cable This is a RGB video cable with 3 screen Individual conductors can be split and Professional S-Video High Quality cable for video. S-Video	ened cabled dused for	Conductor / Ins: Stranding: AWG s, TVs or monitors: RGB Conductors: Center Conductor: Dielectric: Braiding: Jacket: s for red, green ar individual compos Inner Cond: Screen: Jacket: AWG mini DIN plugs. T Insulator: Outer Jacket: Inner conduct:	in AV rooms, comp 7 x 0.127mm tinned copper 1.60mm foam PE 40x0.12mm tinned copper 2.5mm PVC ad blue video. Inside site video signals if 0.12mm OFC 14mm alumin foi PVC 6 x 18mm 23 This is the same cab 1.5mm FPE white PVC 6.5 dia non migration 0.12mm x 7 OFC	cond Resis: Capcitance: Colour uter, conference: Sync / other conductors: Jacket: Shielding: Screen: Drain: be cable insulatior equired. Insulator: 3. Braid: 0. Capacitance: cc cc Capacitance: 6 CAWG 2 Screened for S-V S-Video Cab	0.0366Ω/m@20°C 67.0pF/m Red or training rooms e 7 x 0.2mm tinned copper 1.1mm PVC 30 x 0.03mm Al foil 7 x 0.2mm tinned copper on is colour coded ar 1mm FPE coloured 12mm/6 x 16 tinned 6pF/m between nductor & screen r S-Video video cable 1.1mm x 46 OFC spir. 5 pF/m between onductor and shield 8	Cat. WB-1509 Tet. Intended to be use Braiding: Jacket: AWG Cat. WB-1572 Tet. WB-1579 Cat. WB-1559 Cat. WB-1556 Cables AWG	Per Metre \$3.30 192 x 0.12r 8.1mm PVC 28 1 + Rolls \$79.95 0 signals. Each Per Metre \$5.15	1+ Rolls \$260.00 30 Wall Plate Comm tinned community 4+ Rolls \$71.95 50 Cable is 6min 1+ Rolls \$215.00 10 1+ Rolls	\$230.00 metre roll at. PT-0476. opper 10+ Rolls \$61.95 0 metre roll n diameter. 5+ Rolls \$180.00 0 metre roll 5+ Rolls \$120.00
Professional RGB Video Cable This is a RGB video cable with 3 screen Individual conductors can be split and Professional S-Video High Quality cable for video. S-Video High Quality S-Video & Audio	ened cabled dused for	Conductor / Ins: Stranding: AWG s, TVs or monitors: RGB Conductors: Center Conductor: Dielectric: Braiding: Jacket: s for red, green ar individual compos Inner Cond: Screen: Jacket: AWG mini DIN plugs. T Insulator: Outer Jacket: Inner conduct:	in AV rooms, comp 20 in AV rooms, comp 7 x 0.127mm tinned copper 1.60mm foam PE 40x0.12mm tinned copper 2.5mm PVC 1.20mm 1.5mm FPC 1	cond Resis: Capcitance: Colour uter, conference: Sync / other conductors: Jacket: Shielding: Screen: Drain: c cable insulation: Required. Insulator: Capacitance: Capacitance: Capacitance: Capacitance: Screen: Capacitance: Capacitance: Screen: Capacitance: Screen: Screen: Capacitance: Screen: Screen: Capacitance: Capacitance: Screen: Screen: Capacitance: Capacitance: Capacitance: Screen: Capacitance: Cap	0.0366Ω/m@20°C 67.0pF/m Red or training rooms e 7 x 0.2mm tinned copper 1.1mm PVC 30 x 0.03mm Al foil 7 x 0.2mm tinned copper on is colour coded ar 1mm FPE coloured 12mm/6 x 16 tinned 2pF/m between inductor & screen r S-Video video cable 1mm x 46 OFC spirit 5 mpf x 46 OFC spirit 5 mpf x 46 OFC spirit 6 mid colour coded ar 6 mid colour coded ar 6 pF/m between 6 pF/m between 6 pF/m between 7 s-Video video cable 8 pf deo plug. 2 Audio 6 plug. 2 Audio 7 plug. 2 Audio 6 plug. 2 Audio 7 plug. 2 Audio 7 plug. 2 plug. 2 Audio 7 plug. 2 plug. 2 Audio 7 plug. 2 plu	Cat. WB-1509 Tet. Intended to be use Braiding: Jacket: AWG Cat. WB-1572 Tofic Cat. WB-1559 Tofic WB-1559 Cat. WB-1556 Cables AWG Cat. WB-1556	Per Metre \$3.30 192 x 0.12r 8.1mm PVC 28 1 + Rolls \$79.95 0 signals. Each Per Metre \$5.15 Per Metre \$1.75	1+ Rolls \$260.00 30 Wall Plate Comm tinned community in the co	\$230.00 metre roll at. PT-0476. opper 10+ Rolls \$61.95 0 metre roll n diameter. 5+ Rolls \$180.00 0 metre roll 5+ Rolls \$120.00
Professional RGB Video Cable This is a RGB video cable with 3 screen Individual conductors can be split and Professional S-Video High Quality cable for video. S-Video High Quality S-Video & Audio	ened cabled dused for	Conductor / Ins: Stranding: AWG s, TVs or monitors: RGB Conductors: Center Conductor: Dielectric: Braiding: Jacket: s for red, green arindividual composition of the conductors: Jacket: AWG mini DIN plugs. T Insulator: Outer Jacket: Inner conduct: Inner conduct: Inner conduct: Inner conduct: Insulator: 2 Audio Cables Inner conduct: Insulator:	in AV rooms, comp 7 x 0.127mm tinned copper 1.60mm foam PE 40x0.12mm 2.5mm PVC and blue video. Insidiste video signals if 0.12mm OFC 14mm alumin foi PVC 6 x 18mm 23 This is the same cab 1.5mm FPE white PVC 6.5 dia non migration 0.12mm x 7 OFC at audio and a twin 0.12mm x 25 OFC 3.1mm FPE Red/Wh	cond Resis: Capcitance: Colour uter, conference: Sync / other conductors: Jacket: Shielding: Screen: Drain: cable insulation: Insulator: Capacitance: Capacitance: Capacitance: Screen: Capacitance: Capacitance: Screen: Capacitance: Screen: Capacitance: Capacitance: Screen: Capacitance: Cap	0.0366Ω/m@20°C 67.0pF/m Red or training rooms e 7 x 0.2mm tinned copper 1.1mm PVC 30 x 0.03mm Al foil 7 x 0.2mm tinned copper on is colour coded ar 1mm FPE coloured 12mm/6 x 16 tinned 15pF/m between inductor & screen r S-Video video cable 1.1mm x 46 OFC spir. 5 pF/m between onductor and shield 8 rideo plug. 2 Audio Gile ict: 0.12mm x 7 OFi 1.5mm FPE Whi	Cat. WB-1509 Text. Intended to be use Braiding: Jacket: AWG Cat. WB-1572 Text. WB-1572 Cat. WB-1559 Text. WB-1556 Cables AWG Cat. WB-1556	Per Metre \$3.30 192 x 0.12r 8.1mm PVC 28 1 + Rolls \$79.95 0 signals. Each Per Metre \$5.15 Per Metre \$1.75	1+ Rolls \$260.00 30 Wall Plate Comm tinned community in the co	\$230.00 metre roll at. PT-0476. opper 10 + Rolls \$61.95 0 metre roll n diameter. 5 + Rolls \$180.00 0 metre roll 5 + Rolls \$120.00
Professional RGB Video Cable This is a RGB video cable with 3 screen Individual conductors can be split and Professional S-Video High Quality cable for video. S-Video High Quality S-Video & Audio	ened cabled dused for	Conductor / Ins: Stranding: AWG s, TVs or monitors RGB Conductors: Center Conductor: Dielectric: Braiding: Jacket: Jacket: AWG mini DIN plugs. T Insulator: Outer Jacket: Inner conduct: Inner conduct: Inner conduct: Inner conduct: Insulator: Screen: Screen: Screen: Insulator: Outer Jacket: Inner conduct: Insulator: Screen: Screen: Screen: Screen: Screen: Screen: Screen: Screen: Stranding: Screen: Screen: Screen: Stranding:	in AV rooms, comp 20 in AV rooms, comp 7 x 0.127mm tinned copper 1.60mm foam PE 40x0.12mm tinned copper 2.5mm PVC 1.20mm 1.5mm FPC 1	cond Resis: Capcitance: Colour uter, conference: Sync/ other conductors: Jacket: Shielding: Screen: Drain: e cable insulation: Insulator: Capacitance: Capacita	0.0366Ω/m@20°C 67.0pF/m Red or training rooms e 7 x 0.2mm tinned copper 1.1mm PVC 30 x 0.03mm Al foil 7 x 0.2mm tinned copper on is colour coded ar 1mm FPE coloured 12mm/6 x 16 tinned 6pF/m between inductor & screen or S-Video video cable 1.1mm x 46 OFC spir.5 pF/m between onductor and shield 8 fideo plug. 2 Audio Gele ict: 0.12mm x 7 OFi 1.5mm FPE Whi 0.1mm x 46 OFC spiral	Cat. WB-1509 Text. Intended to be use Braiding: Jacket: AWG Cat. WB-1572 Text. WB-1572 Text. WB-1559 Text. WB-1556 Cables AWG Cat. WB-1556	Per Metre \$3.30 Issed with VGA 192 x 0.12r 8.1mm PVC 28 1+ Rolls \$79.95 Disignals. Each Per Metre \$5.15 Inema. Per Metre \$1.75	1+ Rolls \$260.00 30 Wall Plate Comm tinned community 4+ Rolls \$71.95 5 cable is 6mm 1+ Rolls \$215.00 10 1+ Rolls \$140.00 5	\$230.00 metre roll at. PT-0476. opper 10 + Rolls \$61.95 0 metre roll diameter. 5 + Rolls \$180.00 0 metre roll 5 + Rolls \$120.00 0 metre roll
Professional RGB Video Cable This is a RGB video cable with 3 screen Individual conductors can be split and Professional S-Video High Quality cable for video. S-Video High Quality S-Video & Audio	ened cabled dused for	Conductor / Ins: Stranding: AWG s, TVs or monitors: RGB Conductors: Center Conductor: Dielectric: Braiding: Jacket: s for red, green ar individual composition of the conductors: Jacket: AWG mini DIN plugs. Tinsulator: Outer Jacket: Inner conduct: Inner conduct: Inner conduct: Inner conduct: Insulator: Screen: Braid Shield: Insulator: Screen: Braid Shield: Insulator: In	in AV rooms, comp 20 in AV rooms, comp 7 x 0.127mm tinned copper 1.60mm foam PE 40x0.12mm tinned copper 2.5mm PVC and blue video. Insidite video signals if in the copper 1.60mm foam PE 1.60mm foam PE 2.5mm PVC and blue video. Insidite video signals if in the copper 2.5mm PVC 1.5mm FPE 1.5mm FPE white 1.5mm FPE	cond Resis: Capcitance: Colour uter, conference: Sync/ other conductors: Jacket: Shielding: Screen: Drain: e cable insulation: Insulator: Capacitance: Capacita	0.0366Ω/m@20°C 67.0pF/m Red or training rooms e 7 x 0.2mm tinned copper 1.1mm PVC 30 x 0.03mm Al foil 7 x 0.2mm tinned copper on is colour coded ar 1mm FPE coloured 12mm/6 x 16 tinned ipF/m between inductor & screen r S-Video video cable 1.1mm x 46 OFC spira 5 pF/m between onductor and shield 8 rideo plug. 2 Audio (included) include ict: 0.12mm x 7 OF- 1.5mm FPE Whi 0.1mm x 46 OFC spiral	Cat. WB-1509 Text. Intended to be use Braiding: Jacket: AWG Cat. WB-1572 Text. WB-1572 Text. WB-1559 Text. WB-1556 Cables AWG Cat. WB-1556	Per Metre \$3.30 ssed with VGA 192 x 0.12r 8.1mm PVC 28 1 + Rolls \$79.95 o signals. Each Per Metre \$5.15 inema. Per Metre \$1.75	1+ Rolls \$260.00 30 Wall Plate Comm tinned control	\$230.00 metre roll at. PT-0476. opper 10+ Rolls \$61.95 0 metre roll at. diameter. 5+ Rolls \$180.00 0 metre roll 5+ Rolls \$120.00 0 metre roll

Cable - Speaker Flex

SCREENED AUDIO & VIDEO CABLE (CONTINUED)



\$240.00

\$200.00

WB-1736

\$64.95

\$2.95

WB-1740

\$51.95

\$55.50

Cable - Mic & Coax

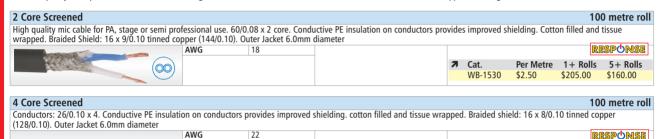
SPEAKER FLEX (CONTINUED)

Pro Audio Speaker Cable Super flexible speaker cable. Separate colour-coded 18AWG red and black conductors in a single outer sheath. Conductors: 41 x 0.16 OFC. Jacket OD: 6mm AWG 18 Cat. Per Metre 1+ Rolls 5+ Rolls WB-1754 \$1.70 \$140.00 \$110.00

Core Pro Audio Speaker Cable Super flexible for stage and professional applications. Four core OFC colour coded conductors. Conductors: 40 x 0.16mm OFC. Jacket OD: 7.5mm AWG | 18 | 7 Cat. Per Metre 1 + Rolls 5 + Rolls WB-1762 \$3.40 \$280.00 \$215.00

PROFESSIONAL MICROPHONE CABLE

The best quality microphone cable for all P.A. and stage use. • Flexible black matt finish PVC low noise cable with tinned copper screening.





75 OHM COAXIAL TELEVISION CABLE

See CCTV cable WB-2017 on page 206.

\$2.70

7 Cat. WB-1540 Per Metre 1+ Rolls 5+ Rolls

\$185.00

\$215.00



75 Ohm RG59 Gas Injected Foam Coax 100 metre ro							
New generation TV Coax. Both a braid & foil, pr	ovides 100% screening.						
RG59/U	Won't get water logged underground. Black in colour. Outside diameter 6mm.		7	Cat. WB-2004	Per Metre \$0.70	1+ Rolls \$55.00	5+ Rolls \$45.00

75 Ohm RG59 Gas Injected Foam Coax								3(0 metre roll	
A 30m roll is generally a common length for a domestic TV antenna installation.										
magazi	Save over buying	by the metre, and	a small roll is easy	to work with.						
	Black WB-2005									
	White WB-2001									
					7	Cat.	1+ Rolls	4+ Rolls	10+ Rolls	
						WB-2005	\$19.95	\$17.95	\$16.20	
						WB-2001	\$21.95	\$19.75	\$17.75	

RG6 Quad Shield 75 Ohm Coax 100 metre roll											
Features a solid 18AWG copper clad steel centre conductor, gas injected foam dielectric and four separate shielding layers to eliminate any outside interference.											
	Centre Conductor:	18AWG copper clad steel	First shielding:	Bonded aluminiu polyester tape	m						
	Core O.D:	4.57mm	Second shielding:	tinned annealed copper		FOXTEL APPROVED					
a live	Jacket O.D:	7.7mm	Nom. Impedance:	75Ω				TOXILL AFFROYED			
	AUSTAR	A00458	TELSTRA	014857	7	Cat.	Per Metre	1 + Rolls	5+ Rolls		
(0)	approval #:		approvai #:			WB-2006	\$1.20	\$80.00	\$65.00		
	Foxtel approval #:	F 30440	OPTUS approval #:	SAP4868							

Freecall order hotline: 1800 022 888

Belden Brand Quad Shield RG6 75 Ohm Coax 100 metre roll Used by Pay-TV installers. Quality U.S made Belden brand. We have repackaged in Australia on 100m reels. Normally this is only available in 1000 feet boxes. It features a solid 18AWG steel centre conductor, copper plated, gas injected polyethylene foam insulation (to keep water out), Black PVC jacket, plus 4 layers of screening: a combination of aluminium foils and braiding. 100% sweep tested 5MHz-1GHz. | Belden part: | 1189A | Jacket O.D: | 7.569mm | Nom. Imped: | 75Ω | TECHTII Belden TECH TIP 18AWG steel Cu 82%, 53.1pF/m **FOXTEL APPROVED** Centre conduct: Vel. of prop: plated 1.016 dia 4.572mm Core O.D: Nom. Capacit: 16.2pF/ft 7 Cat. WB-2009 Per Metre 1+ Rolls 5+ Rolls Austar / Foxtel approval #: 0 F 30456 \$1.80 \$100.00 \$85.00 Belden Brand Quad Shield RG6 75 Ohm Coax 30 metre roll 30m roll of the WB-2009 Belden Coax shown above AWG 18 TECH TIP Austar / Foxtel approval # F 30456 FOXTEL APPROVED BEIDET TECH TIP We do not sell cheap 3C-2V type TV coax. It's screening is inadequate for acceptable 0 1+ Rolls 4+ Rolls 10+ Rolls Cat. performance IN TODAY'S DIGITAL TV ENVIRONMENT \$34.50 WB-2014 \$44.95 \$40.45 **COMMUNICATION & TELEPHONE CABLE**

50 Ohm RG58 C/U Networking								100	metre roll
As used for computer networking.									
	Conductors:	19/0.18 + 112/0.	12mm.		7	Cat.	Per Metre	1+ Rolls	5+ Rolls
	AWG OD 5mm.	23				WB-2012	\$1.95	\$165.00	\$135.00
	UU 5mm.								
EO Ohm DCEO/II								100) metre roll
50 Ohm RG58/U								100	inetre ron
Suited up to 500MHz.	Ideal for CP mar	ine, amateur and to	wo way radio						
	AWG	23	wo-way faulo.		7	Cat.	Per Metre	1+ Rolls	5+ Rolls
	71110	25				WB-2010	\$1.45	\$120.00	\$100.00
50 Ohm RG213/U								100	0 metre roll
Communication cable commonly used in UHF.				_					
communication casic commonly used in oni.	Conductors: 7/0.7	75 + 216/0.12mm		FIII	7	Cat.	Per Metre	1+ Rolls	5+ Rolls
	AWG	23	- U		^	WB-2015	\$3.80	\$280.00	\$230.00
						VVD-2013	\$3.00	\$200.00	\$230.00
2 Pair (4 Wire)								100	metre roll
Flat cable. Ivory colour, 4 x 7 x 0.12mm									
	AWG	28	^ /	ACMA Approved	7	Cat.	Per Metre	1+ Rolls	5+ Rolls
The second secon	(0000)		· //			WB-1620	\$0.60	\$45.00	\$35.00
				<u> </u>					
3 Pair (6 Wire)								100	metre roll
Flat cable. Ivory colour, 6 x 7 x 0.12mm									
	AWG	28	^ /	ACMA Approved	7	Cat.	Per Metre	1+ Rolls	5+ Rolls
	(000000		\wedge		*,	WB-1622	\$0.80	\$55.00	\$45.00
				_					
1 Pair (8 Wire)								100	motro roll

4 Pair (8 Wire)						10	0 metre roll
Flat cable. Beige colour, 8 x 7 x 0.12mm							
	AWG 28	ACMA Approved	7	Cat . WB-1625	Per Metre \$1.10	1+ Rolls \$80.00	5+ Rolls \$65.00

COMPUTER / DATA CABLE

50 Ohm RG174U Coax Cable 20 metre										
Handy 20m length of unterminated RG174/U cable as commonly used in Wi-Fi and amateur radio installations.										
	Impedance: Insulation: AWG	50 ohm Polyethylene (PE) 28	Tinned copper braid. RG174/U	PRICE	7	Cat. WB-2018	1+ Rolls \$19.95	4+ Rolls \$17.75	10+ Rolls \$15.95	

Computer						10	0 metre roll
All are screened to stop RFI.							
6 Way 9 Way 6 Way	AWG	28	7	Cat.	Per Metre	1+ Rolls	5+ Rolls
7/0.12 x 6C + foil + 7/0.16 OD 5m	m		6 Way	WB-1575	\$1.65	\$130.00	\$115.00
9 Way 7/0.12 x 9C + foil + 7/0.16 0D 5mi	m		9 Way	WB-1578	\$1.90	\$150.00	\$130.00
1/0.12 x 3C 1 1011 1 7/0.10 OD 3111							
IDC Ribbon						2	3 motro roll

IDC Ribbon							33	metre roll
	Designed for IDC connectors.	AWG 2	WG 28	7	Cat.	Per Metre	1+ Rolls	5+ Rolls
	besigned for IDC connectors.			16 Way	WM-4502	\$1.85	\$48.00	\$41.00
		00000000	000000000000000000000000000000000000000		WM-4504	\$2.60	\$69.00	\$59.00
	Grey in colour with red trace.	000000000000000000000000000000000000000		50 Way	WM-4508	\$5.10	\$140.00	\$119.00

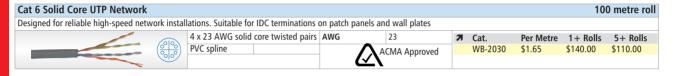
Cable – IT & Security

COMPUTER/DATA CABLE (CONTINUED)

Rainbow Cable 16 Core							3	3 metre roll		
Colour coded strands of insulated conductor bonded together in a flat cable. Ideal for rewiring looms, can be split and each individual wire used.										
	Same rating as 1	3 x 0.12mm light do 25	uty hook-up wire.	7	Cat. WM-4516	Per Metre \$3.30	1+ Rolls \$90.00	5+ Rolls \$76.00		

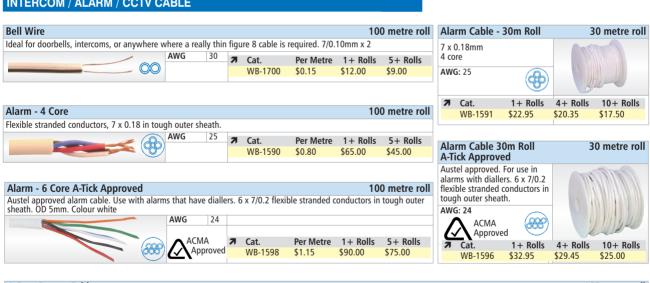
Cat 5e 8 Core Stranded Network					100	0 metre roll			
An ACMA approved high quality cable for patch leads and short runs.									
600	ductor 7/0.20mm copper wire, h ivory colour PVC jacket.								
100MHz.		ACMA Approved	7	Cat.	Per Metre	1+ Rolls	5+ Rolls		
	AWG	24	Z\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		WB-2020	\$1.35	\$110.00	\$80.00	

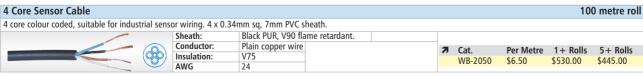






INTERCOM / ALARM / CCTV CABLE





		10	0 metre roll					
Combines RG59 coaxial cable and 16G power cable. Ideal for CCTV and surveillance applications.								
I AWG: 24	Cat. Per Metre VB-2017 \$1.40	1+ Rolls \$110.00	5+ Rolls \$95.00					

DC POWER CABLE														
								· ·	E motro roll					
O Gauge OFC Ultra High Current Run from your battery to distribution blocks and	then 2GA 4GA o	r 8GA to vour amn	lifiers or other now	er equipment for s	erious	ly high curre	nt annlication		5 metre roll					
Truit from your battery to distribution blocks and	Conductor	OFC	Stranding:	7 x 7 x 81 /	Cilous	iy iligii culic	пт аррпсацоп							
	material:		Insulation	0.12mm										
	Current capacity:	200A	material:	PVC	7	Cat.	Per Metre	1+ Rolls	5+ Rolls					
	Total diameter:	15mm	Resistance @ 20°C:	350 micro ohms/m	Red Black	WH-3092 WH-3094	\$19.50 \$19.50	\$437.00 \$437.00	\$350.00 \$350.00					
2 Gauge OFC Ultra High Current							71212		0 metre roll					
Run from your car battery to distribution boxes	and then 8GA or 4	GA to amps, etc.												
	Conductor	OFC	Stranding:	145 x 19 /										
	material: Current capacity:	160A	Insulation	0.12mm PVC	71	Cat.	Per Metre	1+ Rolls	5+ Rolls					
			material: Resistance @		Red	WH-3070	\$14.50	\$360.00	\$315.00					
	Total diameter:	12.0mm	20°C:	0.0007Ω/m	Black	WH-3072	\$14.50	\$360.00	\$315.00					
4 Gauge OFC Super High Current								50	0 metre roll					
Run from your battery to distribution boxes and		mps etc.		177										
	Conductor material:	OFC	Stranding:	7 x 7 x 34/0.127mm										
	Current capacity:	110A	Insulation :	PVC	-	Cat	Day Matua	1 - Della	E Della					
	Total diameter:	10mm	Resistance @ 20°C:	$0.00097\Omega/m$	7 Red	Cat. WH-3064	Per Metre \$8.90	1+ Rolls \$370.00	5+ Rolls \$348.00					
	AWG	4				WH-3066	\$8.90	\$370.00	\$348.00					
8 Gauge OFC High Current								100	0 metre roll					
Good for all but the biggest car amplifiers etc.														
The state of the s	Conductor material:	OFC	Stranding:	7 x 95/0.12mm										
	Current capacity:	56A	Insulation:	PVC	7	Cat.	Per Metre	1+ Rolls	5+ Rolls					
	Total diameter:	6.5mm	Resistance @ 20°C:	0.00252Ω/m	Red	WH-3060	\$3.60	\$330.00	\$275.00					
	AWG	8	Wire Diameter:	4.05mm	Black	WH-3062	\$3.60	\$330.00	\$275.00					
8 Gauge Fig 8 High Current Power Cab								5	0 metre roll					
For higher current applications where twin core		d. Red & black colo	ur for easy identific											
	Conductor material:	OFC	Stranding:	7 x 101 x 81 0.12mm x 2					U DIE					
	Current capacity:		Insulation:	PVC	7	Cat.	Dor Motro	1+ Rolls	5+ Rolls					
	Total diameter: AWG:	6.7mm 8	Resist. @ 20°C: Wire diameter:	0.00252ohm/m 4.05mm		WH-3063	Per Metre \$7.00	\$315.00	\$262.00					
25 Amp DC Auto Power Cable														
Ideal for most outsmating unique. Timed for sometime programming in marine applications														
luear for most automotive wiring. Tinned for co			ions. NOTE!!!											
ideal for filost automotive wiring. Tinned for co	AWG	12	IMP	ROVED!		_								
	AWG Total diameter: Nom. area:	12 3.5mm 2.90mm ²	IMP Tin plated charge!	d at no extra (a must for	71 Red	Cat. WH-3080	Per Metre	1+ Rolls \$185.00	5+ Rolls \$165.00					
Ideal for most automotive wiring. Tinned for co	AWG Total diameter: Nom. area: Insulation Width	12 3.5mm 2.90mm ² 0.5mm	IMP Tin plated charge!	at no extra	Red	Cat. WH-3080 WH-3082	Per Metre \$2.20 \$2.20	1+ Rolls \$185.00 \$185.00	5+ Rolls \$165.00 \$165.00					
	AWG Total diameter: Nom. area:	12 3.5mm 2.90mm ²	IMP Tin plated charge!	d at no extra (a must for	Red	WH-3080	\$2.20	\$185.00 \$185.00	\$165.00					
•	AWG Total diameter: Nom. area: Insulation Width Stranding:	12 3.5mm 2.90mm ² 0.5mm 41/0.30mm	IMP Tin plated charge!	d at no extra (a must for	Red	WH-3080	\$2.20	\$185.00 \$185.00	\$165.00 \$165.00					
16 Gauge 15A 2 Core Auto Cable 15 amp 2/26 x 0.3mm.	AWG Total diameter: Nom. area: Insulation Width Stranding: Red/White figure	12 3.5mm 2.90mm ² 0.5mm 41/0.30mm	IMP Tin plated charge!	d at no extra (a must for	Red Black	WH-3080 WH-3082 Cat.	\$2.20 \$2.20 Per Metre	\$185.00 \$185.00 100	\$165.00 \$165.00 O metre roll 5+ Rolls					
16 Gauge 15A 2 Core Auto Cable	AWG Total diameter: Nom. area: Insulation Width Stranding:	12 3.5mm 2.90mm ² 0.5mm 41/0.30mm	IMP Tin plated charge!	d at no extra (a must for	Red Black	WH-3080 WH-3082	\$2.20 \$2.20	\$185.00 \$185.00	\$165.00 \$165.00 0 metre roll					
16 Gauge 15A 2 Core Auto Cable 15 amp 2/26 x 0.3mm. Response 0 Gauge Red/Clear 2 in 1 Pov	AWG Total diameter: Nom. area: Insulation Width Stranding: Red/White figure Double insulated AWG ver Cable	12 3.5mm 2.90mm ² 0.5mm 41/0.30mm 8 auto cable	IMP Tin plated charge!	d at no extra (a must for	Red Black	WH-3080 WH-3082 Cat.	\$2.20 \$2.20 Per Metre	\$185.00 \$185.00 100 1+ Rolls \$220.00	\$165.00 \$165.00 O metre roll 5+ Rolls					
16 Gauge 15A 2 Core Auto Cable 15 amp 2/26 x 0.3mm.	AWG Total diameter: Nom. area: Insulation Width Stranding: Red/White figure Double insulated AWG ver Cable a neutral opaque of	12 3.5mm 2.90mm ² 0.5mm 41/0.30mm 8 auto cable	IMP Tin plated charge!	d at no extra (a must for e wiring)	Red Black	WH-3080 WH-3082 Cat.	\$2.20 \$2.20 Per Metre	\$185.00 \$185.00 100 1+ Rolls \$220.00	\$165.00 \$165.00 0 metre roll 5+ Rolls \$200.00					
16 Gauge 15A 2 Core Auto Cable 15 amp 2/26 x 0.3mm. Response 0 Gauge Red/Clear 2 in 1 Pov	AWG Total diameter: Nom. area: Insulation Width Stranding: Red/White figure Double insulated AWG ver Cable	12 3.5mm 2.90mm ² 0.5mm 41/0.30mm 8 auto cable	IMP Tin plated charge!	d at no extra (a must for	Red Black	WH-3080 WH-3082 Cat. WH-3079	\$2.20 \$2.20 Per Metre \$2.60	\$185.00 \$185.00 100 1+ Rolls \$220.00	\$165.00 \$165.00 0 metre roll 5+ Rolls \$200.00					
16 Gauge 15A 2 Core Auto Cable 15 amp 2/26 x 0.3mm. Response 0 Gauge Red/Clear 2 in 1 Pov	AWG Total diameter: Nom. area: Insulation Width Stranding: Red/White figure Double insulated AWG ver Cable a neutral opaque of Conductor material: Current capacity:	12 3.5mm 2.90mm ² 0.5mm 41/0.30mm 8 auto cable 16 cable. OFC 300A	IMP Tin plater charge! marin Stranding: Insulation:	96 x 7 x 7 0.12mm	Red Black	WH-3080 WH-3082 Cat. WH-3079	\$2.20 \$2.20 Per Metre \$2.60	\$185.00 \$185.00 100 1+ Rolls \$220.00	\$165.00 \$165.00 0 metre roll 5+ Rolls \$200.00 5 metre roll					
16 Gauge 15A 2 Core Auto Cable 15 amp 2/26 x 0.3mm. Response 0 Gauge Red/Clear 2 in 1 Pov	AWG Total diameter: Nom. area: Insulation Width Stranding: Red/White figure Double insulated AWG ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter:	12 3.5mm 2.90mm ² 0.5mm 41/0.30mm 8 auto cable 16 able. OFC 300A 16mm	Stranding: Insulation: Resist. @ 20°C:	96 x 7 x 7 0.12mm PVC 0.00025Ω/m	Red Black	WH-3080 WH-3082 Cat. WH-3079	\$2.20 \$2.20 Per Metre \$2.60	\$185.00 \$185.00 100 1+ Rolls \$220.00 2!	\$165.00 \$165.00 D metre roll 5+ Rolls \$200.00 5 metre roll 5+ Rolls					
16 Gauge 15A 2 Core Auto Cable 15 amp 2/26 x 0.3mm. Response 0 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for	AWG Total diameter: Nom. area: Insulation Width Stranding: Red/White figure Double insulated AWG ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG:	12 3.5mm 2.90mm ² 0.5mm 41/0.30mm 8 auto cable 16 cable. OFC 300A	IMP Tin plater charge! marin Stranding: Insulation:	96 x 7 x 7 0.12mm	Red Black	WH-3080 WH-3082 Cat. WH-3079	\$2.20 \$2.20 Per Metre \$2.60	\$185.00 \$185.00 100 1+ Rolls \$220.00 2! 1+ Rolls \$437.00	\$165.00 \$165.00 0 metre roll 5+ Rolls \$200.00 5 metre roll 5+ Rolls \$350.00					
16 Gauge 15A 2 Core Auto Cable 15 amp 2/26 x 0.3mm. Response 0 Gauge Red/Clear 2 in 1 Pov	AWG Total diameter: Nom. area: Insulation Width Stranding: Red/White figure Double insulated AWG ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: ver Cable	12 3.5mm 2.90mm ² 0.5mm 41/0.30mm 8 auto cable 16 able. OFC 300A 16mm 0	Stranding: Insulation: Resist. @ 20°C:	96 x 7 x 7 0.12mm PVC 0.00025Ω/m	Red Black	WH-3080 WH-3082 Cat. WH-3079	\$2.20 \$2.20 Per Metre \$2.60	\$185.00 \$185.00 100 1+ Rolls \$220.00 2! 1+ Rolls \$437.00	\$165.00 \$165.00 D metre roll 5+ Rolls \$200.00 5 metre roll 5+ Rolls					
16 Gauge 15A 2 Core Auto Cable 15 amp 2/26 x 0.3mm. Response 0 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for Response 2 Gauge Red/Clear 2 in 1 Pov	AWG Total diameter: Nom. area: Insulation Width Stranding: Red/White figure Double insulated AWG conductor material: Current capacity: Total diameter: AWG: ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: Conductor Conductor	12 3.5mm 2.90mm ² 0.5mm 41/0.30mm 8 auto cable 16 able. OFC 300A 16mm 0	Stranding: Insulation: Resist. @ 20°C:	96 x 7 x 7 0.12mm PVC 0.00025Ω/m 0.12mm	Red Black	WH-3080 WH-3082 Cat. WH-3079	\$2.20 \$2.20 Per Metre \$2.60	\$185.00 \$185.00 100 1+ Rolls \$220.00 2! 1+ Rolls \$437.00	\$165.00 \$165.00 0 metre roll 5+ Rolls \$200.00 5 metre roll 5+ Rolls \$350.00					
16 Gauge 15A 2 Core Auto Cable 15 amp 2/26 x 0.3mm. Response 0 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for Response 2 Gauge Red/Clear 2 in 1 Pov	AWG Total diameter: Nom. area: Insulation Width Stranding: Red/White figure Double insulated AWG ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: ver Cable a neutral opaque of Conductor material:	12 3.5mm 2.90mm² 0.5mm 41/0.30mm 8 auto cable 16 able. OFC 300A 16mm 0	Stranding: Insulation: Resist. @ 20°C: Wire diameter:	96 x 7 x 7 0.12mm PVC 0.00025Ω/m 0.12mm	Red Black	WH-3080 WH-3082 Cat. WH-3079	\$2.20 \$2.20 Per Metre \$2.60	\$185.00 \$185.00 100 1+ Rolls \$220.00 2! 1+ Rolls \$437.00	\$165.00 \$165.00 0 metre roll 5+ Rolls \$200.00 5 metre roll 5+ Rolls \$350.00					
16 Gauge 15A 2 Core Auto Cable 15 amp 2/26 x 0.3mm. Response 0 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for Response 2 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for	AWG Total diameter: Nom. area: Insulation Width Stranding: Red/White figure Double insulated AWG Ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: Ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: Total diameter: AWG: Ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter:	12 3.5mm 2.90mm² 0.5mm 41/0.30mm 8 auto cable 16 able. OFC 300A 16mm 0 able. OFC 200A 13.5mm	Stranding: Insulation: Resist. @ 20°C: Wire diameter: Stranding: Insulation: Resist. @ 20°C:	96 x 7 x 7 0.12mm 91.27 x 7 x 0.12mm 61 x 7 x 7 x 0.12mm	Red Black	WH-3080 WH-3082 Cat. WH-3079 Cat. WH-3093	\$2.20 \$2.20 Per Metre \$2.60 NSE Per Metre \$19.50	\$185.00 \$185.00 100 1+ Rolls \$220.00 2! 1+ Rolls \$437.00 30	\$165.00 \$165.00 0 metre roll 5+ Rolls \$200.00 5 metre roll 5+ Rolls \$350.00 0 metre roll 5+ Rolls					
16 Gauge 15A 2 Core Auto Cable 15 amp 2/26 x 0.3mm. Response 0 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for Response 2 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for	AWG Total diameter: Nom. area: Insulation Width Stranding: Red/White figure Double insulated AWG Ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: Ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: Ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG:	12 3.5mm 2.90mm² 0.5mm 41/0.30mm 8 auto cable 16 able. OFC 300A 16mm 0	Stranding: Insulation: Resist. @ 20°C: Wire diameter: Stranding: Insulation:	96 x 7 x 7 0.12mm PVC 0.00025Ω/m 0.12mm PVC	Red Black	WH-3080 WH-3082 Cat. WH-3079	\$2.20 \$2.20 Per Metre \$2.60 NSE Per Metre \$19.50	\$185.00 \$185.00 100 1+ Rolls \$220.00 2! 1+ Rolls \$437.00 30 1+ Rolls \$360.00	\$165.00 \$165.00 0 metre roll 5+ Rolls \$200.00 5 metre roll 5+ Rolls \$350.00 0 metre roll 5+ Rolls \$350.00					
16 Gauge 15A 2 Core Auto Cable 15 amp 2/26 x 0.3mm. Response 0 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for Response 2 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for Response 4 Gauge Red/Clear 2 in 1 Pov Response 4 Gauge Red/Clear 2 in 1 Pov	AWG Total diameter: Nom. area: Insulation Width Stranding: Red/White figure Double insulated AWG Ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: Ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: Ver Cable	12 3.5mm 2.90mm² 0.5mm 41/0.30mm 8 auto cable 16 able. OFC 300A 16mm 0 able. OFC 200A 13.5mm 2	Stranding: Insulation: Resist. @ 20°C: Wire diameter: Stranding: Insulation: Resist. @ 20°C:	96 x 7 x 7 0.12mm 91.27 x 7 x 0.12mm 61 x 7 x 7 x 0.12mm	Red Black	WH-3080 WH-3082 Cat. WH-3079 Cat. WH-3093	\$2.20 \$2.20 Per Metre \$2.60 NSE Per Metre \$19.50	\$185.00 \$185.00 100 1+ Rolls \$220.00 2! 1+ Rolls \$437.00 30 1+ Rolls \$360.00	\$165.00 \$165.00 0 metre roll 5+ Rolls \$200.00 5 metre roll 5+ Rolls \$350.00 0 metre roll 5+ Rolls					
16 Gauge 15A 2 Core Auto Cable 15 amp 2/26 x 0.3mm. Response 0 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for Response 2 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for	AWG Total diameter: Nom. area: Insulation Width Stranding: Red/White figure Double insulated AWG Ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: Ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: Ver Cable	12 3.5mm 2.90mm² 0.5mm 41/0.30mm 8 auto cable 16 able. 0FC 300A 16mm 0 able. 0FC 200A 13.5mm 2	Stranding: Insulation: Resist. @ 20°C: Wire diameter: Stranding: Insulation: Resist. @ 20°C: Wire diameter:	96 x 7 x 7 0.12mm 91.27 x 7 x 0.12mm 61 x 7 x 7 x 0.12mm	Red Black	WH-3080 WH-3082 Cat. WH-3079 Cat. WH-3093	\$2.20 \$2.20 Per Metre \$2.60 NSE Per Metre \$19.50	\$185.00 \$185.00 100 1+ Rolls \$220.00 2! 1+ Rolls \$437.00 30 1+ Rolls \$360.00	\$165.00 \$165.00 0 metre roll 5+ Rolls \$200.00 5 metre roll 5+ Rolls \$350.00 0 metre roll 5+ Rolls \$350.00					
16 Gauge 15A 2 Core Auto Cable 15 amp 2/26 x 0.3mm. Response 0 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for Response 2 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for Response 4 Gauge Red/Clear 2 in 1 Pov Response 4 Gauge Red/Clear 2 in 1 Pov	AWG Total diameter: Nom. area: Insulation Width Stranding: Red/White figure Double insulated AWG ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: Conductor material: Conductor material:	12 3.5mm 2.90mm² 0.5mm 41/0.30mm 8 auto cable 16 16 200A 16mm 0 200A 13.5mm 2 2 200A 13.5mm 2	Stranding: Insulation: Resist. @ 20°C: Wire diameter: Stranding: Insulation: Resist. @ 20°C: Wire diameter:	96 x 7 x 7 0.12mm PVC 0.00025Ω/m 0.12mm PVC 0.00055Ω/m 0.12mm PVC 0.00055Ω/m 0.12mm	Red Black	WH-3080 WH-3082 Cat. WH-3079 Cat. WH-3093	\$2.20 \$2.20 Per Metre \$2.60 NSE Per Metre \$19.50	\$185.00 \$185.00 100 1+ Rolls \$220.00 2! 1+ Rolls \$437.00 30 1+ Rolls \$360.00	\$165.00 \$165.00 0 metre roll 5+ Rolls \$200.00 5 metre roll 5+ Rolls \$350.00 0 metre roll 5+ Rolls \$350.00					
16 Gauge 15A 2 Core Auto Cable 15 amp 2/26 x 0.3mm. Response 0 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for Response 2 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for Response 4 Gauge Red/Clear 2 in 1 Pov Response 4 Gauge Red/Clear 2 in 1 Pov	AWG Total diameter: Nom. area: Insulation Width Stranding: Red/White figure Double insulated AWG ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: Ver Cable conductor material: Current capacity:	12 3.5mm 2.90mm² 0.5mm 41/0.30mm 8 auto cable 16 able. 0FC 300A 16mm 0 able. 0FC 200A 13.5mm 2	Stranding: Insulation: Resist. @ 20°C: Wire diameter: Stranding: Insulation: Resist. @ 20°C: Wire diameter:	96 x 7 x 7 96 x 7 x 7 0.12mm PVC 0.00025Ω/m 0.12mm PVC 0.00055Ω/m 0.12mm 9000055Ω/m 0.12mm 138 x 7 x 7 0.12mm PVC	Red Black	WH-3080 WH-3082 Cat. WH-3079 Cat. WH-3093	\$2.20 \$2.20 Per Metre \$2.60 NSE Per Metre \$19.50	\$185.00 \$185.00 100 1+ Rolls \$220.00 2! 1+ Rolls \$437.00 30 1+ Rolls \$360.00	\$165.00 \$165.00 0 metre roll 5+ Rolls \$200.00 5 metre roll 5+ Rolls \$350.00 0 metre roll 5+ Rolls \$350.00					
16 Gauge 15A 2 Core Auto Cable 15 amp 2/26 x 0.3mm. Response 0 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for Response 2 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for Response 4 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for	AWG Total diameter: Nom. area: Insulation Width Stranding: Red/White figure Double insulated AWG ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: Ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG:	12 3.5mm 2.90mm² 0.5mm 41/0.30mm 8 auto cable 16 16 200A 16mm 0 200A 13.5mm 2 2 200A 13.5mm 2	Stranding: Insulation: Resist. @ 20°C: Wire diameter: Stranding: Insulation: Resist. @ 20°C: Wire diameter:	96 x 7 x 7 96 x 7 x 7 0.12mm PVC 0.00025Ω/m 0.12mm PVC 0.00055Ω/m 0.12mm PVC 0.00055Ω/m 0.12mm	Red Black	WH-3080 WH-3082 Cat. WH-3079 Cat. WH-3093	\$2.20 \$2.20 Per Metre \$2.60 NSE Per Metre \$19.50	\$185.00 \$185.00 100 1+ Rolls \$220.00 2! 1+ Rolls \$437.00 30 1+ Rolls \$360.00	\$165.00 \$165.00 0 metre roll 5+ Rolls \$200.00 5 metre roll 5+ Rolls \$350.00 0 metre roll 5+ Rolls \$315.00 0 metre roll					
Response 2 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for Response 4 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for Response 5 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for Response 6 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for	AWG Total diameter: Nom. area: Insulation Width Stranding: Red/White figure Double insulated AWG ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: ver Cable	12 3.5mm 2.90mm² 0.5mm 41/0.30mm 8 auto cable 16 able. OFC 300A 16mm 0 able. OFC 200A 13.5mm 2 able. OFC	Stranding: Insulation: Resist. @ 20°C: Wire diameter: Stranding: Insulation: Resist. @ 20°C: Wire diameter:	dat no extra (a must for e wiring) 96 x 7 x 7	Red Black	WH-3080 WH-3082 Cat. WH-3079 Cat. WH-3093	\$2.20 \$2.20 Per Metre \$2.60 NSE Per Metre \$19.50 Per Metre	\$185.00 \$185.00 100 1+ Rolls \$220.00 2! 1+ Rolls \$437.00 30 1+ Rolls \$360.00 50 1+ Rolls \$370.00	\$165.00 \$165.00 0 metre roll 5+ Rolls \$200.00 5 metre roll 5+ Rolls \$350.00 0 metre roll 5+ Rolls \$315.00 0 metre roll					
Response 2 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for Response 4 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for	AWG Total diameter: Nom. area: Insulation Width Stranding: Red/White figure Double insulated AWG ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: ver Cable a neutral opaque of an entral opaque of	12 3.5mm 2.90mm² 0.5mm 41/0.30mm 8 auto cable 16 16 able. OFC 300A 16mm 0 able. OFC 200A 13.5mm 2 able. OFC 100A 10mm 4	Stranding: Insulation: Resist. @ 20°C: Wire diameter: Stranding: Insulation: Resist. @ 20°C: Wire diameter:	dat no extra (a must for e wiring)	Red Black	WH-3080 WH-3082 Cat. WH-3079 Cat. WH-3093	\$2.20 \$2.20 Per Metre \$2.60 NSE Per Metre \$19.50 Per Metre	\$185.00 \$185.00 100 1+ Rolls \$220.00 2! 1+ Rolls \$437.00 30 1+ Rolls \$360.00 50 1+ Rolls \$370.00	\$165.00 \$165.00 0 metre roll 5+ Rolls \$200.00 5 metre roll 5+ Rolls \$350.00 0 metre roll 5+ Rolls \$315.00 0 metre roll 5+ Rolls \$315.00					
Response 2 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for Response 4 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for Response 4 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for Response 8 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for	AWG Total diameter: Nom. area: Insulation Width Stranding: Red/White figure Double insulated AWG ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: ver Cable	12 3.5mm 2.90mm² 0.5mm 41/0.30mm 8 auto cable 16 able. OFC 300A 16mm 0 able. OFC 200A 13.5mm 2 able. OFC	Stranding: Insulation: Resist. @ 20°C: Wire diameter: Stranding: Insulation: Resist. @ 20°C: Wire diameter:	dat no extra (a must for e wiring) 96 x 7 x 7	Red Black	WH-3080 WH-3082 Cat. WH-3079 Cat. WH-3093	\$2.20 \$2.20 Per Metre \$2.60 NSE Per Metre \$19.50 Per Metre	\$185.00 \$185.00 100 1+ Rolls \$220.00 2! 1+ Rolls \$437.00 30 1+ Rolls \$360.00 50 1+ Rolls \$370.00	\$165.00 \$165.00 0 metre roll 5+ Rolls \$200.00 5 metre roll 5+ Rolls \$350.00 0 metre roll 5+ Rolls \$315.00 0 metre roll 5+ Rolls \$315.00					
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Response 2 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for Response 4 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for Response 4 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for Response 8 Gauge Red/Clear 2 in 1 Pov Features a red sheath that can be peeled off for	AWG Total diameter: Nom. area: Insulation Width Stranding: Red/White figure Double insulated AWG Ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: Ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: Ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: Ver Cable a neutral opaque of Conductor material: Current capacity: Total diameter: AWG: Ver Cable a neutral opaque of Conductor material:	12 3.5mm 2.90mm² 0.5mm 41/0.30mm 8 auto cable 16 16 able. 0FC 300A 16mm 0 able. 0FC 200A 13.5mm 2 able. 0FC 100A 10mm 4	Stranding: Insulation: Resist. @ 20°C: Wire diameter: Stranding: Insulation: Resist. @ 20°C: Wire diameter: Stranding: Insulation: Resist. @ 20°C: Wire diameter: Stranding: Insulation: Resist. @ 20°C: Wire diameter:	dat no extra (a must for e wiring) 96 x 7 x 7 0.12 mm PVC 0.00025Ω/m 0.12 mm PVC 0.00055Ω/m 0.12 mm PVC 0.00112Ω/m 0.12 mm 0.12	Red Black 7 7 V	WH-3080 WH-3082 Cat. WH-3079 Cat. WH-3093	\$2.20 \$2.20 Per Metre \$2.60 NSE Per Metre \$19.50 Per Metre	\$185.00 \$185.00 100 1+ Rolls \$220.00 2! 1+ Rolls \$437.00 30 1+ Rolls \$360.00 50 1+ Rolls \$370.00	\$165.00 \$165.00 0 metre roll 5+ Rolls \$200.00 5 metre roll 5+ Rolls \$350.00 0 metre roll 5+ Rolls \$315.00 0 metre roll 5+ Rolls \$315.00					

Cable – Solar & AC Power

IP65 rated

SOLAR SYSTEM CABLE

UV Stabilised Solar Power Cable 100 metre roll Very tough cable, specifically for the rigours of outdoor use in solar panel installations. Dust, age and UV resistant, tinned copper conductors to minimise corrosion. Use with our PV connectors for complete environmental protection. Cat. No Dia(mm) Rated current(A): TÜV CERTIFIED Three types WH-3120 2.5mm sq. 42A WH-3120 available: WH-3121 4mm sq. 58A See page 320 for WH-3122 6mm sq. 76A **Solar Connectors** Tin plate copper, Class 5 Conductor material: WH-3121 Insulation material: Per Metre 1+ Rolls 5+ Rolls 1000VDC Rated voltage: WH-3120 \$3.00 WH-3121 \$3.50 \$225.00 \$265.00 100m x 2.5mm² \$250.00 Temperature range: -40 to - 125°C 100m x 4.0mm² \$295.00 TUV certification: 2 PfG 1161/01.06

AC MAINS CABLE

WH-3122

Two Core Mains Flex						1	00 metre roll
Two-core mains flex cable (no earth) with a white outer PVC jacket. Suitable for general 240V work not requiring an earth.							
Each conductor is 0.75mm ² .		7	Approvals	Cat.	Per Metre	1+ Rolls	5+ Rolls
Rated to 7.5A Safety Approval Number: Q080451		7.5A	Q080451	WB-1560	\$1.10	\$90.00	\$80.00

100m x 6.0mm²

Three Core Mains Flex 100 metre roll Standard 240V 3 core mains flex power cable with a white outer PVC jacket. Suitable for extension cables and general 240V work where an earth is required. Each conductor 1.0mm². Rated to 10A Approvals Per Metre 1+ Rolls 5+ Rolls Safety Approval Number: Q080451 10A Q080451 WB-1562 \$2.50 \$200.00 \$175.00

Twin / Earth Wiring - Lighting					10	00 metre roll
Twin Earth Flat Cable						
	Each conductor is 0.75mm ² .	7	Cat.	Per Metre	1+ Rolls	5+ Rolls
	Rated to 7.5A Safety Approval Number: 0080451	10A	WB-1565	\$2.50	\$205.00	\$185.00

Twin / Earth Wiring - Power 100 metre rol									
Twin Earth Flat Cable									
	2.5 mm ² 7/0.67,		Cat.	Per Metre	1+ Rolls	5+ Rolls			
	20 amp (power)	20A	WB-1568	\$3.95	\$330.00	\$275.00			

GENERAL PURPOSE POWER CABLE

Flexib	le Light Duty					10	0 metre roll
name and all				13 x 0.12n Suited for a	all gene		
	Cat. WH-3010 Cat. WH-3012 Cat. WH-3014 Cat. WH-3016	Orange Green	Cat. WH-3011 Cat. WH-3013 Cat. WH-3015 Cat. WH-3017	PVC insula Max 80°C		ork. availa	able.
7	Cat. VVII-3010	vviiite	All Types	AWG25 Per Metre \$0.25	1+ R \$15.0		5+ Rolls \$12.00

Heavy Duty				10	00 metre ro	oll
24 x 0.2mm. Suitable for 250V v	viring and ge	neral heavy du	ıty wo	rk.		
	PVC insulatio	n	Red	Cat. WH-304	10	
				Black	Cat. WH-30	41
The second second		Rated at 7.5	amps.	. Green Cat. WH-3042		
		AWG18				
7		Per Metre	1+	Rolls	5+ Rolls	
	All Types	\$0.50	\$40.0	00	\$30.00	

Extra Heavy Duty			100 metre roll		
24 x 0.2mm. Suitable for 250V wiring and go	eneral heavy d	uty work			
	Suitable for 250V wiring and general heavy duty work.				
	Rated at 10 a				
	PVC insulation	n			
Chirax	Max 80°C				
	AWG17				
	Brown Cat. V	VH-3050	Blue Cat WH-3052		
71	Per Metre	1+ Ro	lls 5+ Rolls		
All Types	\$0.70	\$60.00	\$45.00		

HOOK-UP CABLE

Flexible Light Duty - Rolls			25 r	metre roll	
Quality 13 x 0.12mm tinned hook-u	p wire on plastic sp	ools.			
	Rated at	600mA	Max 80	O°C	
	PVC inst	llation	AWG26		
	Red	WH-3000	Yellow	WH-3004	
	Black	WH-3001	Green	WH-3005	
	Brown	WH-3002	Blue	WH-3006	
	Orange	WH-3003	White	WH-3007	
7	1+	Rolls 4+	Rolls	10+ Rolls	
	Sold Per Roll \$4.95	\$4.4	5 :	\$3.90	

\$460.00

WH-3122 \$5.50

\$415.00

Flexible Light Duty Reel Packs - Pack of 8				25 metre roll	
Quality 13 x 0.12mm tinned h	ook-up wire on pl	astic spools.			
	F	Rated at 600m	nA N	Max 80°C	
		PVC insulation		AWG26	
	Cat.	1+ Pack	Δ⊥ Pa	acks 10+ P	acks
**					
Pkt 8	WH-3009	\$34.95	\$31.45	5 \$28.50)

Hook Up Cable Packs			- 2	2 metre	lengths
2 metres of 8 different colours of 1	0 x 0.12mn	n hook-up cab	le		
		Lengths: 2 me	etres	16 metre	es in all
		Qty: 8 pcs		10 x 0.12mm	
7	Cat.	Qty 1+	Qty 5	5+ Q	ty 10+
	WH-3025	\$4.95	\$4.45	5 \$3	3.90

Cable Accessories

Wire Glue

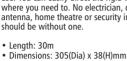
A soldering iron in a jar. Wire Glue is a electrically conductive adhesive that enables you to make solder-free connections when you don't have a soldering iron handy, or aren't able to apply heat for some reason. Hundreds of hobby, trade and electronics uses. Lead-free, cures overnight.



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	NM-2831	\$9.95	\$8.75	\$7.75

Wire Draw Fish Tape

A fish tape is a tool that's used to draw wire and cable through wall cavities or conduit. The smart way is with 30m of flat, rigid spring steel with a built-in cable eye on the end that rolls up into its own case after use. You can easily direct the rigid wire exactly where you need to. No electrician, data cable, antenna, home theatre or security installer





7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1869	\$29.95	\$27.95	\$23.70

Economy Breadboard Jumper Kit



Solid core hookup cable, which is the ideal size for breadboards. All you need to do is cut it to whatever lengths you require and strip the ends.
2 metres each of 5 colours

Colours may vary from time to time.

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	WH-3032	\$3.45	\$3.05	\$2.70

Breadboard Jumper Kit



This kit consists of 70 pcs of single core sturdy wire which has been stripped on each end and bent at right angles. They are specifically made for breadboards. Supplied in a plastic box for easy storage. There are 5 pieces each of 14 different lengths.

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	PB-8850	\$11.95	\$10.70	\$9.50

Standard Jumper Lead Kit

Ideal for connecting devices for testing

- Alligator clip size is approx 40mm
- Jaw opening is about 8mm
- Cable length is approx 300mm.10 leads supplied 2 of each colour.

			4 (9)	
7	Cat.	Qty 1+	Qty 10+	Qty 50+
	MC CO10	¢c or	¢C DE	¢E DE

Heavy Duty Jumper Lead Kit

This kit has large alligator clips and heavy cable.

- The alligator clips are approximately 50mm long
 Jaw openings of about 10mm.
- Cable length is approx 300mm • 10 leads supplied, 2 of each colour.

7	Cat.	Qty 1+	Qty 10+	Qty 50+
	WC-6020	\$11.95	\$10.70	\$9.50

Retractable Alligator Test Lead Set

Set of 3 heavy duty leads in red, black, and green terminated with insulated alligator clips in a handy retractable reel. 3m in length, it is ideal for testing and troubleshooting electronic systems by connecting from components in machinery to test equipment or bypassing long wiring to isolate a fault.

- Rating when wound: 6A
- Rating when unwound: 10A
- Lead Length: 3 metres
- Reel Dimensions: 152(Dia) x 20(W)mm

				*
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	WT-5334	\$24.95	\$22.35	\$19.70

Nichrome Resistance Wire

Used for wiring heating elements such as toasters, etc. 80% nickel, 20% chromium. Resistance 13.77 ohm per metre.

- Size 28 B&S (0.315mm).
- Pack of 4 metres.



LENGTH 4 METRES

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	WW-4040	\$4.95	\$4.45	\$3.90

Wire Wrap on Spools

This Kynar wire is high quality silver plated.

- Available in three colours.
- · Supplied on a 33 metre reel

7	Cat.	Qty 1+	Qty 4+	Qty 10+
Red	WW-4344	\$15.95	\$14.35	\$12.70
Black	WW-4345	\$15.95	\$14.35	\$12.70
Blue	WW-4346	\$15.95	\$14.35	\$12.70



Enamelled Copper Wire

This soft copper wire is coated in a high dielectric strength varnish. You can solder through the enamel, but we recommend that you lightly sandpaper the wire ends with 200+ grit paper to ensure good solder adhesion, especially with RoHS type solder.





mm	B&S	Wght	SWG	Approx L(m)	Cat.	1+ Rolls	4+ Rolls	10+ Rolls
0.25	30	25g	33	58	WW-4012	\$6.95	\$6.25	\$5.50
0.315	5 28	25g	31	40	WW-4013	\$6.95	\$6.25	\$5.50
0.4	26	25g	28	22	WW-4014	\$6.95	\$6.25	\$5.50
0.5	24	100g	25	57	WW-4016	\$9.95	\$8.75	\$7.75
0.63	22	100g	23	36	WW-4018	\$9.95	\$8.75	\$7.75
0.8	20	100g	21	22	WW-4020	\$9.95	\$8.75	\$7.75
1.0	18	100g	19	14	WW-4022	\$9.95	\$8.75	\$7.75
1.25	16	100g	18	9	WW-4024	\$9.95	\$8.75	\$7.75

Tinned Copper Wire

Two handy sizes of 22 awg (0.71mm) for wire links etc.



7	Weight	Cat.	1 + Rolls	4+ Rolls	10+ Rolls
	25g	WW-4032	\$12.95	\$11.35	\$10.35
	100g	WW-4030	\$29.95	\$26.90	\$23.70

CABLE STAPLE GUNS

Cable Staple Gun

Take the pain out of cable installation. Instead of trying to pound away with a hammer, simply staple the cable to eaves, rafters or joists. The staples have an integral plastic cable clamp that holds the cable firmly in place. Each gun takes a variety of staples sizes to accommodate cables up to 12.5mm diameter.

- Includes gun, 2 interchangeable blades and 200 staples Refill staples available

71	Pkt	Cat.	Qty 1+	Qty 3+	Qty 6+
Cable Gun		TH-2610	\$19.95	\$17.70	\$15.70
Refill Staples 4-6mm	200	TH-2611	\$9.95	\$8.75	\$7.75
Refill Staples 6-8mm	200	TH-2612	\$9.95	\$8.75	\$7.75

Heavy Duty Cable Staple Gun Kit 4 - 12.5mm

Includes heavy duty die cast gun, 3 interchangeable blades and 200 staples in a carry case.





7	Pkt	Cat.	Qty 1+
Cable Gun		TH-2615	\$29.95
Refill Staples 8-9mm	200	TH-2616	\$4.95
Refill Staples 9.5-11mm	200	TH-2617	\$4.95
Refill Staples 11.5-12.5mm	200	TH-2618	\$4.95



Heatshrink Tubing

Our heatshrink is flexible and made from

- flame-resistant polyolefin.
 Made to UL224 E180908 125°C.
- Shrinks to 50% of its size.
 Shrink with a heatgun, hairdryer or a gas burner, match etc.
- Length is 1.2 metres.









* Clear heatshrink not halogen free.



Dia(mm)	Green	Black	Red	Clear	Blue	White	Yellow	Qty 1+	Qty 4+	Qty 10+
1.5	WH-5510	WH-5530	WH-5540	WH-5550*	WH-5560	WH-5570	WH-5590	\$1.45	\$1.30	\$1.15
2.5	WH-5511	WH-5531	WH-5541	WH-5551*	WH-5561	WH-5571	WH-5591	\$1.65	\$1.45	\$1.30
3.0	WH-5512	WH-5532	WH-5542	WH-5552*	WH-5562	WH-5572	WH-5592	\$1.85	\$1.65	\$1.45
5.0	WH-5513	WH-5533	WH-5543	WH-5553*	WH-5563	WH-5573	WH-5593	\$1.95	\$1.75	\$1.55
6.0	WH-5514	WH-5534	WH-5544	WH-5554*	WH-5564	WH-5574	WH-5594	\$2.25	\$1.95	\$1.80
10	WH-5515	WH-5535	WH-5545	WH-5555*	WH-5565	WH-5575	WH-5595	\$2.95	\$2.60	\$2.30
16	WH-5516	WH-5536	WH-5546	WH-5556*	WH-5566	WH-5576	WH-5596	\$3.95	\$3.45	\$3.15
20	WH-5517	WH-5537	WH-5547	WH-5557*	WH-5567	WH-5577	WH-5597	\$5.75	\$4.95	\$4.60

2:1 SHRINK RATIO **HALOGEN FREE**

Yellow & Green Heatshrink Tubing

- 1 2m lengths
- Ideal for indicating earth connections

TECH TIP	
2:1	
SHRINK	RATIO
SHRINK	RATIO

7	Cat	Qty 1+	Qty 4+	Qty 10+
3mm	WH-5610	\$2.95	\$2.60	\$2.30
10mm	n WH-5612	\$3.95	\$3.45	\$3.15



Abrasion Resistant & Flame Retardant

Heatshrink Tube 50mm Black

Ideal for bundling battery packs, but also used for grips on kayak paddles etc. 2:1 shrink rate. Supplied in 300mm lengths.





Heatshrink Caps - Adhesive Lined

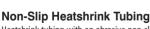
10 PER PACK

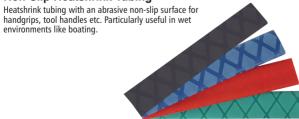
A range of heatshrink end caps for sealing telecommunications and power cable ends. Seals against moisture, chemicals and corrosion. Each pack contains 10 pieces and includes adhesive lining. Applications include automotive, marine, industrial etc. High shrink rate, halogen-free, high mechanical strength

- Shrink rate: 4:1 Flame retardant
- Minimum shrink
- temperature: 110°C

1

Bl	ack					
7	Size (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+	
	5.7	WH-5660	\$3.95	\$3.45	\$3.15	
	7.4	WH-5662	\$4.95	\$4.45	\$3.90	
	10.8	WH-5664	\$6.95	\$6.25	\$5.50	





4	7	Size (mm)	Pack/Colour	Cat.	Qty 1+	Qty 4+	Qty 10+
		30 x 200	2 Black	WH-5658	\$6.95	\$6.25	\$5.50
		20 x 200	4	WH-5655	\$12.95	\$11.35	\$10.35

Solder Splice Heat Shrink Tube - Pack of 5

Solder splice heat shrink tubes allow you to quickly join two cables thanks to the small section of solder in the middle of the tube. Simply slide a tube over the join in two cables and heat as you would any other shrink tube. As the tube shrinks the solder melts to electrically connect the wires resulting in a join which is reliable and well insulated. Available in three sizes

approximately 40mm in length with 5 pieces per pack. Shrink ratio 2:1.





7	Diameter (mm)	Pk	Cat.	Qty 1+	Qty 4+	Qty 10+
	2.7	5	WH-5670	\$4.95	\$4.45	\$3.90
	4.5	5	WH-5671	\$4.95	\$4.45	\$3.90
	6.0	5	WH-5672	\$4.95	\$4.45	\$3.90

Heatshrink Tape - Black

Ideal for emergency repairs or when you aren't able to use a piece of tubing. It conforms to odd shapes that heatshrink tubing is unable to, and has a low melting point adhesive for easy installation. It also remains flexible at extremely low temperatures. Keep a roll in the toolie.

- Operating temperature: -40 105°C
- Shrink temperature: 125°C 25mm wide x 5m roll

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	WH-5659	\$12.95	\$11.35	\$10.35

Comprehensive Heatshrink Pack

• 1 length each of 7 different colours in 7 different sizes ranging from 1.5mm diameter to 20mm.

• Sizes: 1.5, 3, 5, 6, 10, 16 & 20mm Note: Clear is NOT halogen Free





Handy Heatshrink Pack

Handy assortment of our high quality heatshrink tubing Sizes from 1.5mm to 10mm









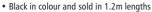
Qty 4+ Qty 10+ WH-5525 \$6.95 \$6.25

Heatshrink & Conduit

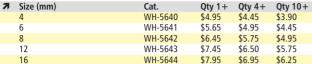
HEATSHRINK (CONTINUED)

Heatshrink Tubing with Glue Lining 4:1

The heat sensitive glue on the internal wall of the tube melts when heat is applied, allowing for a professional water and



• 4:1shrink ratio.





A box of six common sizes of 95mm long glue lined heatshrink. Includes 20 pcs 4.0mm, 15pcs 6.0mm, 10pcs 8.0mm, 5pcs 12mm, 5pcs 16mm, & 5pcs 19mm - 60pcs total.

This is an economical way to get this product.

• Supplied in a see-thru nylon snap shut case

• Box measures: 205(W) x 108(D) x 35(H)mm



71	Cat.	Qty 1+	Qty 4+	Qty 10+
	WH-5521	\$29.95	\$26.90	\$23.70

Heatshrink Assortment Trade Pack

All the heatshrink the technician, tradesman or serious hobby user will ever need. The pack contains 160 lengths of different sizes in a handy storage case.

- 1.5mm: 40 x black, 10 x red, 10 x clear
- 2.5mm: 25 x black, 5 x red, 5 x clear
 3mm: 17 x black, 4 x red, 4 x clear
- 5mm: 14 x black, 3 x red, 3 x clear
 6mm: 6 x black, 2 x red, 2 x clear
- 10mm: 6 x black, 2 x red, 2 x clear

• Case size: 205(L) x 110(W) x		phone hatte	dad a	THE ACCUSE
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	WH-5524	\$19.95	\$17.70	\$15.70

Heatshrink 3.2 x 6.4mm x 600mm - Clear

Cross-linked, polyvinylidene heatshrink tube. High mechanical strength, abrasion resistance and heat resistance for sustained periods compared to normal heatshrink, so is ideal for under-bonnet or industrial wiring. It's also fuel, oil and solvent resistant. Rated for continuous operation up to 175°C

Pack has two sizes: 3.2 and 6.4mm in 600mm lengths

- RoHS compliant
- MIL and UL approvals

Specifications	
Shrink rate	2:1
Temperature range	-55 - 175°C
Tensile strength	5500 PSI



PVC Spaghetti Tubing Pack - 12 piece

This sleeving is made from soft PVC. It does not shrink with heat. It is ideal for high-voltage protection of smaller wires, has abrasion resistance or you can bundle several smaller wires inside a length.

- 4 sizes 1.5, 3.0, 5.0 & 10mm.
- · Colours black, red, yellow, white, clear & blue.
- All 300mm long.
- 85°C rated
- Note: colour quantities vary from pack to pack

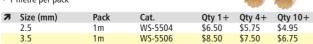
7	Cat.	Qty 1+	Qty 4+	Qty 10+		
	WS-5502	\$9.95	\$8.75	\$7.75		

Vidaflex Fibreglass Heat Resistant Sleeving

A woven fibreglass product used where heat or abrasive resistance is needed for a "spaghetti" type insulation application. Supplied in most commonly used sizes.



1 metre per pack



CONDUIT

ID Heatshrink Marker Sleeves

These marker sleeves are used to identify wire and cable, tools, and hoses. They can withstand abrasion and exposure to cleaning solvents and industrial fluids. The sleeves are flame retardant and can be used as electrical insulation. You can write on it with a ball point pen or marker to make cable or loom identification and tracing a snap. It can also be printed on with thermal transfer equipment. They're supplied in packets of 20 in two different diameters.

- Temperature rate: -55 135°C
- Dielectric strength = 19.7KV/mm Shrink rate: 3:1 UL certified

20 X 60MM PK 20 Cat. WH-5527 9 X 60MM PK 20 Cat. WH-5528

7	Size	Per Pack	Cat.	Qty 1+
	20 x 60mm	20	WH-5527	\$2.95
	9 x 60mm	20	WH-5528	\$1.00

Flexible Conduit Adaptors

These products enable you to professionally & safely terminate flexible cable to terminal boxes, enclosures etc.







ERAZU

111 1502	1117-130	10
Туре	Pieces	Cat.
3/4" Flexible Conduit Adaptor	2	HP-1300
3/4" Flexible Conduit Adaptor	10	HP-1302
3/4" Flexible Conduit Adaptor Panel Mount	2	HP-1304
3/4" Flexible Conduit Adaptor Panel Mount	10	HP-1306
3/4" Flexible Conduit Adaptor Removable	2	HP-1308
3/4" Flexible Conduit Adaptor Removable	10	HP-1310

CLEARANCE PRICE

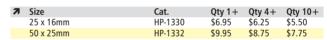
HP-1310

7	Pack	Cat.	Qty 1+
Conduit Adaptor	2	HP-1300	\$1.95
Conduit Adaptor	10	HP-1302	\$6.95
Conduit Adaptor Panel Mount	2	HP-1304	\$1.95
Conduit Adaptor Panel Mount	10	HP-1306	\$6.95
Conduit Adaptor Removeable	2	HP-1308	\$3.95
Conduit Adaptor Removeable	10	HP-1310	\$15.95

Rectangular Cable Duct - 1m

Keep your home theatre cables under control and neatly out of the way. Available in two sizes and in convenient 1m lengths, the leads to your wall-mounted plasma or LCD TV will be kept bundled up but easily accessible. The cover can be quickly removed and replaced for maintenance and can be painted to match the colour of your wall.

• 25 x 16mm x 1m Cat HP-1330 50 x 25mm x 1m



Floor or Wall Cable Ducting

This extruded ducting helps conceal messy cables across doorways, along skirting boards or walls. Great for offices or home. The ducting is 50.8mm wide and is sold in convenient 1.83m lengths





是是2月30	
Pack	Cat.

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Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
20	HP-1226	\$15.95	\$14.35	\$12.70

Round Desk Grommet

No more tangled wires and cables! The desk grommet is the perfect way to easily and neatly store your power, communication, audio ,video, computer and data cables. It is ideal for installation in desks, workstation, telephones cabinets or entertainment unit. Simply drill or cut a 60mm hole through the surface and insert the grommet into the hole.



- Dimensions: 60mm (diameter)
- · Black in colour

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	HP-1228	\$9.95	\$8.75	\$7.75

Dune Tube with Applicator - Black

Keep your cables neat and tidy. They are easily bent for corners and are slit so cables can enter or leave at any point. Simply slip in the cable, insert the applicator and slide away. Easier to use than Spiral Binding; more secure than Loom Tube!

Made from black flexible plastic INCLUDES SPECIAL WIRE SHUTTLE.



Dia.	Length	Cat	Qty 1+	Qty 4+	Qty 10+
15mm	2.5m	HP-1235	\$9.95	\$8.75	\$7.75
20mm	2.5m	HP-1237	\$11.95	\$10.70	\$9.50
20mm	10m	HP-1239	\$39.95	\$35.90	\$31.90

Spiral Binding

Keep wiring tidy! Available in 2 sizes and colours and is easily wrapped around bunches of cables to keep them tidy.



7 Dia.	Length	Cat	Qty 1+	Qty 4+	Qty 10+
6mm	2.5m	HP-1218	\$6.15	\$5.50	\$4.90
12mm	1.5m	HP-1219	\$6.15	\$5.50	\$4.90
6mm	2.5m	HP-1220	\$6.15	\$5.50	\$4.90
12mm	1.5m	HP-1222	\$6.15	\$5.50	\$4.90

Loom Tubes

Tidy up the cables behind your PC or audio equipment, secure cabling in your car. The Loom Tube will keep wiring in place and suits many types of applications. The tube has a slit so that cables can enter/leave at any point

along its length.

• Made from black flexible PVC.

- Three diameters available:
- Available in either 2m or



See previous page for Desk Grommets

7 Dia.	Length	Cat	Qty 1+	Qty 4+	Qty 10+
7mm	2m	HP-1221	\$3.20	\$2.83	\$2.45
10mm	2m	HP-1224	\$3.80	\$3.30	\$2.95
19mm	2m	HP-1227	\$4.95	\$4.45	\$3.90
7mm	10m	HP-1223	\$14.95	\$13.35	\$11.70
10mm	10m	HP-1225	\$15.95	\$14.35	\$12.70
19mm	10m	HP-1229	\$19.95	\$17.70	\$15.70

VELCRO TIES

Mixed Hook & Loop Cable Ties

Keep your cables neat and tidy. Packet of 16 hook & loop cable ties in assorted sizes from 125 to 180mm.

7	Cat.	Qty 1+	Qty 4+	Qty 10
Pkt 16	HP-1232	\$9.95	\$8.75	\$7.75

Hook & Loop Cable Ties

Tidy up behind the TV or audio equipment with these re-usable hook & loop cable ties. Each tie is 140mm in length

HP-1210



CABLE TIES



Length	Pack	Cat	Qty 1+	Qty 4+	Qty 10+
100mm	20	HP-1200	\$1.85	\$1.65	\$1.45
150mm	15	HP-1201	\$2.25	\$1.95	\$1.80
200mm	15	HP-1202	\$2.50	\$2.21	\$1.95
300mm	15	HP-1245	\$2.95	\$2.60	\$2.30
500mm	15	HP-1248	\$5.95	\$5.25	\$4.75
605mm	15	HP-1249	\$6.95	\$6.25	\$5.50
100mm	100	HP-1203	\$4.95	\$4.45	\$3.90
150mm	100	HP-1204	\$7.95	\$6.95	\$6.25
200mm	100	HP-1205	\$10.95	\$9.75	\$8.75
300mm	100	HP-1246	\$12.95	\$11.35	\$10.35
100mm	500	HP-1211	\$17.95	\$15.95	\$14.35
150mm	500	HP-1212	\$29.95	\$26.90	\$23.70
200mm	500	HP-1213	\$39.95	\$35.90	\$31.90
300mm	500	HP-1247	\$45.00	\$40.45	\$35.95

Extra Long Mixed Cable Tie Set

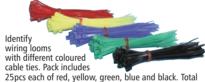


This handy cable tie set contains 70 black cable ties of various lengths up to 500mm

- 10 pcs 500(L) x 10(W)mm 20 pcs 400(L) x 5(W)mm 30 pcs 300(L) x 4(W)mm

7	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	70	HP-1209	\$18.95	\$16.95	\$14.95

Coloured Cable Ties



25pcs each of red, yellow, green, blue and black. Total 125 cable ties. Length 100mm.

7	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	25	HP-1196	\$9.95	\$8.75	\$7.75

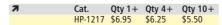
100mm Label Cable Ties

PACK OF 20 Ideal for large or complex wiring looms, these allow you to label cable bundles for identification later to make tracing or faultfinding easy. Easily marked with permanent marker or self-adhesive labels.

Pack Cat. Qty 1+ Qty 4+ Qty 10+ HP-1244 \$3.50 \$3.15

Releasable Cable Tie Pack

Releasable cable ties are perfect for temporarily securing cables or for jobs where you need to periodically change cables. This handy pack contains 10 pieces at lengths of 125, 200, and 300mm. The release lever is located below the head of the cable tie making it easy to access but unlikely to be released accidentally. The ties are made from UV resistant black nylon and have safe edges to prevent cuts



Cable Tie Tidy Kit

Consists of: 30 x 120mm cable ties, 20 x 120mm reusable cable ties, 10 x self adhesive cable tie mounts, 20 x saddle type cable tie mounts.

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	HP-1198	\$9.95	\$8.75	\$7.75

Cable Tie Box - 400 pieces

Let's face it, the mixed box of cable ties

in all the colours of the rainbow is fine, however most of the time you only use about 2-3 different sizes and blacks the colour because of its UV stability. This is your box. This kit consists of: 100 pcs x 200mm, 100 pcs x 150mm, 200 pcs x 100mm.

All in a see through flat storage case that makes access to the ties easy. The box even has some compartment dividers included so that it becomes a parts storage box when all of the ties have been used up

• Box measures; 250(W) x 180(D) x 40(H)mm

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	HP-1216	\$19.95	\$17.70	\$15.70

Cable Tie Gun

Once you have wrapped the tie around the cable you simply slide the tail into the gun and pull the trigger. This will tighten the tie and cut off the excess to produce a neat and professional finish.

 Tension adjustment for different ties.

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	TH-2600	\$23.95	\$21.35	\$18.95

Silicone Rescue Tape

Rescue tape is a self-fusing tape made of the highest quality materials for a permanent air-tight and water-tight seal in emergency situations. Just wrap it around a troublesome leak and it will bond in seconds. The tighter you stretch the tape, the quicker it will bond. Brilliant!

- · Resists fuels, oils, acids, solvents, salt water, road salt, UV rays
- Remains flexible
- to -60°C (-85° F)
 Operating temperature range:
 -65°C to 260°C / -85°F to 500°F
- Continuous temperature range: -60°C to 200°C / -76°F to 392°F
- Cold brittle point: -85° F / -65° C Tensile strength (Min.): 700 psi
- Elongation (Min.): 300% Tear strength (Min.): 85 ppi Bond strength (Min.): 2 Lbs
- Water absorption (Max.): 3% By Weight Dielectric strength (Min): 400 volts/mil (8,000 V/20 Mil)
- Measures 1" x 12 FT (Approx: 25.4mm x 3657.6mm)



You can repair a

burst radiator

hose with this!

NA-2829

Pkt 5

CABLE TIE MOUNTS

Concrete Cable Tie Mounts

Use these cable tie mounts in runs along walls and ceilings made of brick or concrete.

- UL 94V-2 approved Nylon.
- Hole required:
 Approx. 7mm dia
- x 37mm deep



7	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	20	HP-0795	\$5.50	\$4.90	\$4.30
	100	HP-0796	\$23.50	\$20.95	\$18.70

Adhesive Cable Tie Mounts

These are used in conjunction with our cable ties. They simply stick to the surface, then the cable tie is looped through and around the cables.
• 21mm square.



7	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	10	HP-1195	\$4.50	\$3.95	\$3.60

Cordgrip Clampe

For cab diamet

- Pane
- Black

ples 7.4mm - 8 er, (3 wire ma el cutout 14mn k nylon	3.2mm ins).		
Pack Cat.	Oty 1+	Otv 4+	Otv 10+

7 HP-0716 \$1.95 \$1.75 \$1.55

For cables 6.2mm - 7.4mm diameter.

Panel cutout 11.5mm

7	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	4	HP-0718	\$1.95	\$1.75	\$1.55

CABLE CONNECTORS

Crimp Wire Connectors

The easy way to connect 2 or 3 wires together. Simply insert into the connector, & squeeze with a pair of pliers. They are filled with sealant to provide moisture resistance Accepts cable up to 2.08mm OD.



(6 x 2 WIRE) & (2 x 3 WIRE) CONNECTORS

7	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	8	HP-1214	\$4.95	\$4.45	\$3.90

2 WIRE CONNECTORS

7	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	50	HP-1270	\$10.95	\$9.75	\$8.75

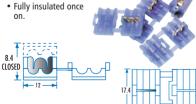
3 WIRE CONNECTORS

7	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	50	HP-1272	\$14.95	\$13.35	\$11.70

Contact Connectors

Simply wrap around the existing wire and new wire and squeeze. Connector cuts through insulation and makes contact without damaging the conductor.





				<u>*</u>	$ \square$ \square
7	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	4	HP-1206	\$2.95	\$2.60	\$2.30

Quick Splice Connectors

Simply insert your wires and squeeze it closed to connect and crimp. Quick, easy, and secure. Nylon insulation rated to 105°C







Dack	Ca	+ 0	tv 1 J	Oty /
PT-4737	C	12-10AWG	6	
PT-4637		16-14AWG		
PT-4537	Α	22-18AWG	6	

Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
6	PT-4537	\$2.75	\$2.45	\$2.15
6	PT-4637	\$2.75	\$2.45	\$2.15
6	PT-4737	\$2.75	\$2.45	\$2.15

RUBBER FEET

Small Stick On

Dimensions: 12 x 12mm

- Height 6mm

 Moulded in oil resistant synthetic rubber 			Ye	-	
7	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	4	HP-0815	\$2.50	\$2.21	\$1.95

20 HP-0816 \$7.95 \$6.95 \$6.25

Large Stick On

- Dimensions: 20 x 20mm
- Height 8mm Moulded in oil
- resistant synthetic rubber

7	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	4	HP-0825	\$3.95	\$3.45	\$3.15
	20	HP-0822	\$9.95	\$8.75	\$7.75

Screw On Equipment Feet

- · Silver in colour
- Screw on Pack of 4

HP-0830 - 30mm HP-0832 - 50mm

7	Size mm	Cat.	Qty 1+	Qty 4+	Qty 10+
	30	HP-0830	\$6.95	\$6.25	\$5.50
	50	HP-0832	\$8.95	\$7.95	\$6.95

Screw Fixing Rubber Feet

Requires 3mm screw and nut.





7	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	8	HP-0800	\$4.50	\$3.95	\$3.60

RUBBER GROMMETS

Rubber Grommets

Suitable for use with chassis up to 16 gauge/1.5mm.

- · Moulded in oil resistant synthetic rubber
- Black



CHASSIS HOLE 9.5MM. CABLE DIA 6MM.

7	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	8	HP-0702	\$3.95	\$3.45	\$3.15

CHASSIS HOLE 12.7MM. CABLE DIA 9.5MM

7	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	8	HP-0704	\$4.65	\$4.15	\$3.60

CABLE GLANDS

IP68 Waterproof Cable Glands

These unique cable clamps incorporate a unique sealing mechanism which works on the camera shutter principle. Simply mount the clamp, insert the cable through and tighten up. There is no need to

disassemble the clamp prior to installation. These clamps are rated to IP68. This is the highest rating possible. They are totally dust tight and protected against

- submersion in water. Trapezoidal thread for quick high torque tightening No throwaway "O" rings

- Long metric thread
- Superior strain relief
- UL Approved NYLON 94V-2

3 - 6.5MM	DIA	CABLE	Thread	EG-7
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7	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	2	HP-0720	\$4.95	\$4.45	\$3.90

- 8MM DIA CARLE Thread EG-9

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7	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+	
	2	HP-0724	\$5.45	\$4.90	\$4.30	

5 - 10MM DIA CABLE Thread EG-11

	7	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
l		2	HP-0727	\$5.95	\$5.25	\$4.75

12MM DIA CABLE Thread EG-13.5

7	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+	ĺ
	2	HP-0732	\$6.45	\$5.75	\$4.95	

10 - 14MM DIA CABLE Thread EG-16

7	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	2	HP-0736	\$6.95	\$6.25	\$5.50

13 - 18MM DIA CABLE Thread EG-21

7	Pack	Cat.	Qty 1+	Qty 4+	Qty 10-
	2	HP-0740	\$7.95	\$6.95	\$6.25

IP68 Nickel Plated Brass Cable Glands

These nickel-plated brass cable glands are certified to IP68 and provide superior grip and sealing.

They are totally protected and 0-ring sealed



against the ingress of dust, moisture and water to a depth of one metre. The unique design speeds installation and eliminates the need to disassemble the gland before fitting. A self-adjusting cable seal allows the glands to be used on a wide range of cable sizes and minimises inventory holdings. These glands are supplied complete with seals and locknuts. 5 sizes are available.

Cat.	Cable Size
HP-0744	3 to 6.5mm
HP-0745	4 to 8mm
HP-0746	5 to 10mm
HP-0747	6 to 12mm
HP-0748	10 to 14 to 8mm

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	HP-0744	\$7.45	\$6.50	\$5.75
	HP-0745	\$7.95	\$6.95	\$6.25
	HP-0746	\$8.95	\$7.95	\$6.95
	HP-0747	\$9.45	\$8.50	\$7.50
	HP-0748	\$9.95	\$8.75	\$7.75

PCB STANDOFFS

Adhesive PCB Standoffs

The self adhesive base sticks directly to the chassis.

- Requires 4mm PCB hole
- Adhesive pads 18mm square.Two heights available.
- Nvlon

7 Height	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
6.35mm	25	HP-0760	\$11.95	\$10.70	\$9.50
12.7mm	25	HP-0762	\$13.95	\$12.35	\$10.95

Screw Mount PCB Supports

These supports have a 2.5mm hole for securing to chassis with a screw, use 3 x 10mm or a self tapper.

- Two heights available.
- Requires 4mm PCB hole
- Nylon



7 Height	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
10mm	25	HP-0764	\$7.95	\$6.95	\$6.25
20mm	25	HP-0766	\$9.95	\$8.75	\$7.75

Flush Mount PCB Supports

These are virtually flush mount on the underside of the chassis.

- PCB hole 4mm
- Chassis hole 5.5mm
- Chassis thickness 0.8-1.2mm.
- Two heights available.

• Nylon		(139)					
7 Height	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+		
6.35mm	25	HP-0774	\$6.95	\$6.25	\$5.50		
10mm	25	HP-0776	\$7.50	\$6.75	\$5.95		

Screwless PCB Standoff

Nylon

Saves using nuts, bolts and spacers. Size 8mm. Requires 3mm hole each end.



7	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	8	HP-0770	\$2.50	\$2.21	\$1.95

Metal Right Angle PCB Standoffs

Threaded M3 standoffs, right angle



7	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	8	HP-0872	\$4.95	\$4.45	\$3.90

CABLE CLIPS / CLAMPS

Adhesive Cable / Bundle Mounts

These have an adhesive base 25 x 18mm and cable tie that clips into the base to retain

- individual cables, or bundles of wiring.

 The maximum cable bundle diameter
- accommodated is 17mm. • The base also has a 3mm hole for a screw mount if required

7	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	10	HP-1190	\$6.95	\$6.25	\$5.50

Adhesive Cable Clips

The easy way to secure cables to walls, cabinets etc. Simply peel off adhesive cover and slip cable in.

 Please note al Nylon





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Please	note	all	sizes	are	in	mm	

I sizes are in mm.	<u></u> Ε—η
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Cat.	А	D	C	υ	E .
HP-0782	11.7	5.9	15.9	2.5	5.2
HP-0784	13.4	8.2	16.0	4.7	8.0
HP-0786	19.0	11.9	19.0	7.9	11.8

7	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	25	HP-0782	\$9.50	\$8.50	\$7.50
	25	HP-0784	\$10.50	\$9.25	\$8.25
	25	HP-0786	\$11.50	\$10.35	\$8.95

Cable Clips

These clips are made using a high-density polyethylene plastic material and galvanised high carbon steel nails. Available in packets of 25 and are priced up to 50% less than others

4 sizes available



3 X 5MM

Accepts cables up to 3mm high by 5mm wide. Suits the following: WB-1706/WB-1708 speaker cable & 6 core flat telephone cable.

7	Pack	Cat	Qty 1+	Qty 4+	Qty 10+
	25	HP-0680	\$2.45	\$2.15	\$1.95

5 X 8MM EXPANDABLE

Suits round cables with 5 x 8mm diameter - including 4 core alarm cable, 75Ω thin coax and 50Ω thin coax.

7	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	25	HP-0682	\$2.75	\$2.45	\$2.15

5 X 7MM

Accepts cable up to 5mm high by 7mm wide. Suits the following: WB-1706/WB-1708 speaker cable & 6 core flat telephone cable

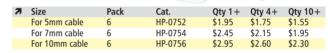
7	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	25	HP-0692	\$2.95	\$2.60	\$2.30

7 - 10MM EXPANDABLE

Suitable for round cable 7-10mm diameter - including 6 core alarm cable, air spaced coax and Belden coax.

7	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	25	HP-0694	\$3.45	\$3.05	\$2.75

'P' Type Cable Clamps



SPACERS

Untapped Nylon Spacers

UntappedID 4.1mm. OD 6.4mm.



Length	Diameter	Pack	Cat	Qty 1+	Qty 4+	Qty 10+	
6mm	6mm	25	HP-0930	\$6.95	\$6.25	\$5.50	
10mm	6mm	25	HP-0934	\$7.95	\$6.95	\$6.25	

Untapped Nylon PCB Spacers

Superb range of spacers. Fixing is by size 6 or 8 self tapping screws. The hex centre section can be gripped to prevent rotation while fixing.

OD 8.2mm.



7	Length	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	6mm	5	HP-0980	\$2.75	\$2.45	\$2.15
	12mm	5	HP-0982	\$2.75	\$2.45	\$2.15
	19mm	4	HP-0984	\$2.75	\$2.45	\$2.15
	25mm	4	HP-0986	\$2.95	\$2.60	\$2.30
	32mm	4	HP-0988	\$3.50	\$3.15	\$2.75
	38mm	4	HP-0990	\$3.95	\$3.45	\$3.15

3mm Tapped Nylon Spacers

These spacers are tapped all the way through for a 3mm screw.

• OD 6mm.







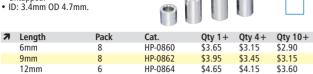
7	Length	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	6.3mm	25	HP-0920	\$8.95	\$7.95	\$6.95
	9mm	25	HP-0922	\$9.45	\$8.50	\$7.50
	12mm	25	HP-0924	\$9.95	\$8.75	\$7.75
	15mm	25	HP-0926	\$11.95	\$10.70	\$9.50

SPACERS (CONTINUED)

Untapped Metal Spacers

- · Nickel plated steel
- Untapped.





HP-0866

HP-0907

3mm Tapped Metal Spacers

Pack

Nickel plated

Length

10mm

15mm

25mm

25mm

3mm standard metric thread



\$5.25

\$4.45

\$3.95

\$4.45

\$3.90

\$4.75

\$4.95

\$5.95

FASTENERS & SCREWS

Metric Nylon Fasteners

- Precision moulded from white nylon.
- · Fully insulated
- · Suitable for high temperature work
- Corrosion free and won't shake loose.
 Ideal for transistor and heatsink use
 Supplied in polybag Round heads

M3 NYLON SCREWS, NUTS & WASHERS							
Size	Туре	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+	
M3 x 12mm	Screws, Phillips Drive Head	10	HP-0140	\$2.95	\$2.60	\$2.30	
M3 x 25mm	Screws, Phillips Drive Head	10	HP-0142	\$3.50	\$3.15	\$2.75	
M3 Nuts	Hex	10	HP-0146	\$3.00	\$2.60	\$2.30	
M3 Nuts	Hex with Washer	25	HP-0150	\$6.50	\$5.75	\$4.95	
M3 Washer	Flat	10	HP-0148	\$2.50	\$2.21	\$1.95	

Wis washer	i idi	10	111 01 10	\$2.50	42.21	¥1.55
M4 NYLON	SCREWS, NUTS & WASHE	RS				
Size	Туре	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
M4 x 10mm	Screw, Phillips Drive Head	25	HP-0160	\$7.50	\$6.75	\$5.95
M4 x 16mm	Screw, Phillips Drive Head	25	HP-0162	\$8.50	\$7.50	\$6.75
M4 Nuts	Hex	25	HP-0168	\$7.00	\$6.25	\$5.50

M4 Washers Flat 10mmOD, 4.2mmID 25 HP-0166 \$5.00

Woodscrews

- · Ideal for mounting speakers
- Black finish
- No.6 size suitable for tweeters, midrange and crossovers.

 No.10 size suitable for Woofers
- · Phillips Head

Size	Туре	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
No.6 x 15mm	Round Head (Tweeters)	20	HP-0620	\$4.95	\$4.45	\$3.90
No.6 x 15mm	Countersunk	20	HP-0626	\$4.95	\$4.45	\$3.90
No.8 x 25mm	Countersunk	20	HP-0625	\$5.95	\$5.25	\$4.75
No.10 x 30mm	Round Head (Woofers)	20	HP-0624	\$5.95	\$5.25	\$4.75
No.10 x 30mm	Countersunk	20	HP-0628	\$5.95	\$5.25	\$4.75

Self-Tapping Screws

· Nickel plated Steel





Size	Туре	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
No.4 x 6mm	Phillips Head	25	HP-0550	\$3.00	\$2.60	\$2.30
No.4 x 9mm	Phillips Head	25	HP-0565	\$3.00	\$2.60	\$2.30
No.4 x 12mm	Phillips Head	25	HP-0554	\$3.50	\$3.15	\$2.75
No.8 x 12mm	Phillips Head	25	HP-0558	\$4.00	\$3.60	\$3.15

DO A FRIEND A FAVOUR

If you have a technical friend or someone who may be just interested in some of the products we stock, simply mail or email his or her address to: **Catalogue Department** Jaycar Electronics: PO Box 107 Rydalmere, NSW 2116 or email



Metric Metal Thread Fasteners

- Nickel or Cadmium Plated and passivated screws
- Supplied in polybag



M3 EQUIPMENT SCREWS

*Black japan	ned screws used holding	top/sid	e panels or	n VCR, DVI	D, Amplifie	ers, etc.
Size	Туре	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
M3 x 5mm	Screw, Phillips, Black	25	HP-0440	\$2.30	\$2.03	\$1.80

M3 SCREWS, NUTS & WASHERS

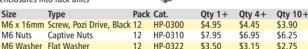
Size	Туре	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+		
M3 x 6mm	Screw, Pozi Drive Head	25	HP-0400	\$2.50	\$2.21	\$1.95		
M3 x 10mm	Screw, Pozi Drive Head	25	HP-0403	\$3.00	\$2.60	\$2.30		
M3 x 15mm	Screw, Pozi Drive Head	25	HP-0406	\$3.50	\$3.15	\$2.75		
M3 x 20mm	Screw, Pozi Drive Head	25	HP-0410	\$3.50	\$3.15	\$2.75		
M3 x 25mm	Screw, Pozi Drive Head	25	HP-0414	\$3.50	\$3.15	\$2.75		
M3 x 32mm	Screw, Pozi Drive Head	25	HP-0418	\$4.00	\$3.60	\$3.15		
M3 Nuts	Hex	25	HP-0425	\$2.95	\$2.60	\$2.30		
M3 Washers	Flat	25	HP-0430	\$3.00	\$2.60	\$2.30		
M3 Washers	Shakeproof	25	HP-0433	\$3.50	\$3.15	\$2.75		
M3 Washers	Spring	25	HP-0436	\$3.00	\$2.60	\$2.30		

M4 SCREWS, NUTS & WASHERS

Size	Туре	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
M4 x 10mm	Screw, Pozi Drive Head	25	HP-0450	\$3.50	\$3.15	\$2.75
M4 x 15mm	Screw, Pozi Drive Head	25	HP-0453	\$4.50	\$3.95	\$3.60
M4 Nuts	Hex	25	HP-0462	\$3.50	\$3.15	\$2.75
M4 Washers	Flat	25	HP-0465	\$3.50	\$3.15	\$2.75
M4 Washers	Shakeproof	25	HP-0468	\$4.00	\$3.60	\$3.15

M6 Rack Screws, **Nuts & Washers**

Suitable for mounting rack style enclosures into rack units



NUTS & SPRINGS

Potentiometer Nuts

Packet of 12 potentiometer nuts and washers.



7	Size	Thread	Cat.	Qty 1+	Qty 10+	Qty 50+
	24mm	3/8" 32THD	RP-3500	\$2.85	\$2.53	\$2.23
	16mm	Metric	RP-7500	\$2.85	\$2.53	\$2.23

200 Piece Spring Assortment

This set contains approximately 200 springs, with 20 different types, compression and tension. They range from 10mm long to 70mm long.

· Sizes for all are given on the lid

· Supplied in a plastic storage case



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	HP-0638	\$19.95	\$17.70	\$15.70

DID YOU KNOW...

John Dalton (1766 - 1844)

John Dalton was an English chemist, meteorologist and physicist. He is best known for his pioneering work in the development of modern atomic theory,

and his research into colour blindness (sometimes referred to as Daltonism, in his honour).



STORAGE CASES

Ideal for carrying small components and is an indispensable addition to any tool kit. See through plastic construction enables the contents to be easily identified and the 2 snap action latches secure the lid and keep everything in its rightful place.

6 Compartment Mini Storage Case

2 of the compartments have guides to enable them to be divided in half and 2 dividers are included.

Compartments: 27(W) x 77(L) x 23(D) mm

Overall size: 125(W) x 85(L) x 27(D)mm.

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	HB-6308	\$2.75	\$2.45	\$2.15

18 Compartment Storage Box

This storage box consists of three rows with removable dividers so you can configure it for longer parts.

Compartment size: 37(L) x 37(W) x 30(D)mm

Dimensions: 230(L) x 115(W) x 35(H)mm

7	Cat.	Qty 1+	Qty 4+	Qty 10+	
	HB-6306	\$4.45	\$3.95	\$3.45	

18 Compartment Storage Case

The basic box has 6 compartments measuring 43(W) x 37(D) x 167(L)mm. These can be divided into 2. 3 or 4 sub-compartments using the dividers provided.

• Overall size: 274(W) x 40(D) x 175(L)mm

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	HB-6312	\$7.95	\$6.95	\$6.25

28 Compartment Storage Case

Can be configured to have anything from 4 big compartments measuring 350(W) x 52(L) x 45(D) mm to 28 compartments measuring 48(W) x 52(L) x 45(D) mm, or anything in between using the dividers provided.

Overall size: 357(W) x 48(H) x 220(D)mm

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	HB-6313	\$11.95	\$10.70	\$9.50

Industrial Storage Cases

Built for the rough and tumble of the building site, factory or workshop. Made from sturdy ABS with solid clasps and removable compartment trays so you can take parts with you to the job. Two sizes available

15 COMPARTMENT STORAGE

12 compartments: 55(L) x 40(W) x 50(D)mm 3 compartments: 80(L) x 50(W) x 50(D)mm 335(L) x 205(W) x 60(D)mm Case size:

19 COMPARTMENT STORAGE

4 compartments: 55(L) x 40(W) x 50(D)mm 8 compartments: 80(L) x 50(W) x 50(D)mm 7 compartments: 110(L) x 80(W) x 50(D)mm 335(L) x 420(W) x 60(D)mm Case size:

7		Cat.	Qty 1+	Qty 4+	Qty 10+
	15 Compartment	HB-6304	\$8.95	\$7.95	\$6.95
	10 Compartment	HR-6305	¢1/105	¢12.25	¢11 70

DID YOU KNOW...

lames Prescott Ioule (1818 - 1889)

Determined the rate at which heat is produced by an electric current by using Joule's law.

Freecall order hotline: 1800 022 888

Julius Robert von Mayer (1814 – 1878)

Along with James Joule, he discovered the first law of thermodynamics.

30 Drawer Parts Cabinet

6 rows of 5 drawers, measuring 50(W) x 115(D) x 30(H)mm. Ideal for workshop use & can be wall mounted.

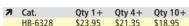
- · Stack multiple units together for larger
- storage.
 Overall size 280(W) x 130(D) x 210(H) mm.

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	HR-6323	\$22.95	\$20.35	\$18.35

33 Drawer Parts Cabinet

This is a good sized unit. It has eight rows of four drawers 50(W) x 108(D) x 32(H) mm plus one full width drawer.

- Large size
 Overall size: 260(W) x 120(D) x 345(H) mm.

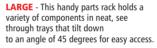


6 Bin Parts Rack Cabinets

SMALL - Similar to our large parts rack, this unit is designed to house smaller items such as ICs, nuts, screws etc.

- Trays measure 60(W) x 65(H) x 45(D)mm each and also tilt down to 45 degrees.
- The rack can be wall mounted & multiple units can be used for larger storage requirements.

 • Overall size: 400(W) x 75(H) x 60(D)mm



- Each has an integral label holder and measures 85(W) x 95(H) x 65(D)mm
- The rack can be wall mounted and multiple units can be nested together for larger storage requirements
- Dimensions are 600(W) x 110(H) x 90(D)mm

NUN
FIL
Three units

stacked

7		Cat.	Qty 1+	Qty 4+	Qty 10+
	Small Rack Cabinets	HB-6317	\$8.95	\$7.95	\$6.95
	Large Rack Cabinets	HB-6318	\$19.95	\$17.70	\$15.70

Conductive Foam

Non-static reusable sheeting for storing CMOS, IC's, LSI's, etc.

- Will store up to 150 ICs on one sheet Size 225 x 150mm.
- Ideal for lining storage trays to provide antistatic protection

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	ZV-9998	\$9.95	\$8.75	\$6.75

DISCOUNT TRADE CARD

If you regularly purchase electrical or electronic goods to be used for business purposes you may qualify for a Jaycar Electronics Trade Card which entitles you to substantial discounts on most Jaycar products. Discounts range from 5% to 30% depending on the type and quantity of product purchased. Excludes Kits & Books.

ABN will be required - see our website or Store Manager for further details.





Sight & Sound

As you are aware, Jaycar does not sell Flatscreen TV's or other consumer electronics. Why? Mainly because we honestly feel that we could not do a better job than the major retailers. We simply do not have the room to display 50+ large screen TV's along with refrigerators, washing machines etc. Those guys will beat themselves to a pulp to give you a great deal on those products.

They will let you down BADLY, however, when it comes to hard technical advice. They simply do not employ people who understand the interface between products. This is where Jaycar comes in. We are the absolute experts at the cabling and interfacing. Indeed most of the majors simply refer people straight to us when then start to ask the "hard" questions.

On another note, we have some fantastic new lighting products for 2012! In keeping with everything else LED technology is taking over party lighting in a big way! See page 282 for our new UV LED spotlights.





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TURNTABLES

USB Turntable with Amp

Copy your LPs, 45s or even 78s straight to your PC, or simply listen to your record collection via the built-in amp and speakers. It also has auxiliary RCA outputs so you can run it to a separate amplifier. Finished in contemporary white piano finish with blue LFD accents

- USB cable and software included
- Contemporary look
- Suits XP, Vista & MAC • Dimensions: 320(W) x
- 265(D) x 85(H)mm





3 Speed Turntable with **Speakers & Audio Output**

Spin your vinyl records with this modern turntable. The built-in speakers allow you to listen to your vinyl collection directly from the unit. It has a line level output for connection to an external amplifier. Features a 3.5mm headphone jack for personal listening with adjustable bass control. Great for the family home or apartment.



- Stereo amplifier
- Automatic stop45 RPM adaptor
- 3.5mm headphone jack Mains powered
- Dimensions: 350(L) x 310(D) x 130(H)mm





7		Cat.	Qty 1+	Qty 3+	Qty 6+	
	3 Speed Turntable	GE-4136	\$64.95	\$58.50	\$51.95	
	Spare Stylus - Pk 2 NEW	GE-4137	\$19.95	\$17.70	\$15.70	



USB Turntable

A contemporary design turntable that converts your old vinyl to modern digital WAV, MP3 or OGG format. It has a high quality magnetic cartridge which ensures clear and distortion free conversion. Equipped with a built-in pre-amp, it has a line level RCA output for component or amplifier integration. Incorporating a belt drive system, that is selectable between 33/45 RPM speeds and an auto stop function. agnetic Cartrick

Mains powered

Dimen



1SIONS: 37U(L) X 35U(D) X 95(H)MM	7
& Analogue io Outputs	

71	Cat.	Qty 1+	Qty 3+	Qty 6+
Turntable Player	GE-4134	\$99.00	\$88.95	\$78.95
Spare Stylus NEW	GE-4135	\$24.95	\$22.35	\$19.70

5 in 1 Multi-function Stereo with Direct Encoding

With a modern design, this music centre is one the whole family can use. No need for with a finderit design, this music centre is one the whole family can use, no need for separate devices to play all your audio technology. The unit is equipped with a full size turntable to play different size LPs in 3 speeds; a CD and cassette player, an AM/FM radio. It also comes with an SD/USB MP3 player and recorder. The recorder allows direct encoding to the USB or SD from the CD or turntable or even copy from USB to SD or vice versa!

A truly powerful and versatile unit, crystal clear music is played through a pair of stereo speakers and has RCA line outputs for amplifier or Hi-Fi system integration.

Cat.

- · Belt drive system
- Built-in amplifier
 Amplified output power 2 x 2WRMS
- 2 x 5W Stereo speakers
 Programmable CD memories
- Repeat one/all function
- Rass hoost function

Dimensions: 370(L) x 300(D) x 170(H)mm





Qty3+

\$17.70

Qty 1+

\$199.00

\$19.95



Otv 6+

\$158.95

\$15.70





Music Centre	GE-4132
Spare Stylus - Pk 2 NEW	GE-4137

TURNTABLES ACCESSORIES Carbon Fibre Record Brush

If you have a collection of vinyl, vou'll need to keep it in tip-top condition. Carbon fibre brushes are the best way to remove surface grit before playing. Millions of microscopic hairs get into every groove and when you're finished, the built-in handle has a cleaning bar to get rid of the dust from the bristles. Essential for every turntable owner.



J

71	Cat.	Qty 1+	Qty 3+	Qty 6+
	GE-4051	\$9.95	\$8.75	\$7.75

Video, Audio & CD Drive Belt

Now you can have a selection of high quality drive belts on hand for fast turnaround of you can insert a selection of high quality linke betts on hand to last uninaround repairs and maintenance of a wide variety of video and audio equipment. The pack contains 25 of the most popular sizes in a combination of square and flat belts. There are 21 square belts ranging from 23mm to 120mm and 4 flat belts covering 56mm to 93mm. Belts lean more towards video use.

D	Т	W	D	Т	W	D	Т	W	D	Т	W
23	S	1.7	40	S	1.2	70	S	1.2	93	F	10.0
23	S	2.0	45	S	2.0	71	S	1.2	97	S	1.2
24	S	2.0	56	F	8.0	72	S	1.2	98	S	2.4
24	S	1.2	60	S	1.0	76	F	6.0	114	S	1.8
26	S	1.9	68	S	1.2	83	S	2.0	120	S	1.2
26	S	1.8	70	S	1.0	91	F	5.8	120	S	2.3
32	S	1.2									

MP3 Player Module with Remote Control



D = Inside dia in mm = Type (Square or Flat), = Width in mm W

7

1	Cat.	Qty 1+	Qty 3+	Qty 6+
	HP-0650	\$19.95	\$17.70	\$15.70

Portable Cassette Tape to MP3 **Encoder with PC Connection**

Dust off your old cassette tapes and rescue your retro-chic 80s and 90s music collection with this tape to MP3 encoder. Simply install the included software to your computer, plug in the encoder via USB and you're ready to digitally convert, restore and archive all your precious cassette music. Digitally remaster the soundtracks of your youth to enjoy and share on CD, YouTube, iPod®, iPhone® etc.



Supplied with USB cable, simple to follow instructions, plus software: MAGIX Audio Cleaning Lab SE and Audacity.

- Play, stop, rewind and fast forward buttons
- Small, compact and portable for play and transfer anywhere
 Converts to MP3 or WAV file formats with track recognition
- Plays chrome and normal cassette tapes
 Includes headphone socket
- PC requires 1 x USB port and 1 x CD drive
- Windows compatible software
 Powered from USB port or requires 2 x AA batteries
 Size: 118(W) x 93(L) x 32(D)mm





fantastic for car audio applications. Considering the price of some car audio systems a do it yourself could save a considerable amount of money

(5VDC) or a 12VDC source connected straight to the PCB making this

A fantastic little MP3 player module perfect for car or home audio applications. The

small PCB with front panel can be installed into the enclosure of your choice allowing you to playback MP3 files from a USB drive or SD Card. It can be powered either from the front panel USB port

with this unit. It uses an easy to read red character LED display and can also playback FM radio

- Frequency Response: 100Hz- 20kHz
 Includes IR Remote control
 Supports FAT12/16 File Systems
 Supports 320Kbps MP3 files
- Panel Buttons: Repeat, EQ, Prev/Vol-Play/Pause, Next/Vol+, Mode
- Blue power LED indicator Red character LFD display
- Dimensions: 75(W) x 49(H) x 46(D)mm

7	Cat.	Qty 1+	Qty 2+	Qty 4+
	ΔΔ-0229	\$14.95	\$13.35	\$11.70

Cat. Qty 3+ Qty 6+ GE-4071 \$69.95 \$62.95 \$55.95

DIGITAL CONVERTER

RCA to USB Digital Converter

Studio quality recording solution. Suitable for converting any line-level audio device to USB for stereo PC recording. RCA to USB converts analogue to digital audio in high resolution.

Simply install Magix Audio Cleaning Lab SE & Audacity software included to import your music & optimise sound recording quality.

Specifications	
Audio output	16-bit 44.1kHz digital
Recording software	
Suitable for PC & N	1AC
Cable Length	1.2 metres



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	GE-4050	\$34.95	\$31.45	\$27.90

Freecall order hotline: 1800 022 888





Music Centres – Cassette & CD Players

USB CASSETTE PLAYERS / ENCODERS

USB Casette Plaver

Transform your beloved cassette tape collection into digital MP3 format directly via a PC. This versatile music box features cassette playback, high quality amplified speakers, crystal clear AM/FM tuner, blue backlight LCD and alarm clock functions. It also comes complete with USB cable and easy to use Audacity software to convert your tapes to MP3

- · Play/record music directly to PC via USB
- Blue backlit LCD panel Store up to 30 FM stations
- Built-in amplifier and stereo speakersLine in & headphone jack
- USB cable and Audacity software included
- Windows compatible
- Dimensions: 250(W) x 204(D) x 85(H)mm







Cat. GE-4140

Otv 6+



CD to USB/SD Encoder/Player with Clock & Radio

Bring your 80s and 90s music collection back to life with the multi-function Cassette Player. Digitally encode your old cassette tape collection straight to SD card or memory stick or use as a standard cassette player with its high quality amplified internal speakers. The unit also allows recording directly from a USB drive to SD card or vice versa. This modern & user friendly device also features a crystal clear AM/FM digital tuner, blue back light LCD, alarm clock with sleep & snooze function.

- Cassette playbackUSB / SD card reader
- Repeat one / all / Program / Random play
- Blue backlit LCD panel AM / FM tuner

- Store up to 40 stations
 Built-in amplifier and stereo speakers
- Line in & Headphone output
 Requires 2 x AAA batteries
- Dimensions: 250(W) x 204(D) x 85(H)mm



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	GE-4139	\$99.00	\$88.95	\$78.95

CD to USB/SD Encoder with Clock & Radio

The perfect multi-functional device for listening & ripping your music collection. The music box allows you to record your CD collection straight to SD card or memory stick. You can also record directly from USB drive to SD card or vice versa. This modern & user friendly design also features a crystal clear AM/FM tuner, blue back light LCD, alarm clock with sleep & snooze function. Wake up to your choice of radio, buzzer, CD or favourite songs stored on SD card or memory stick.

Features battery back up, protects you're settings in case of a power failure.

- CD / CD-R, RW / MP3-CD playback
- USB / SD card reader
- Repeat one / All / Program / Random play
 Blue backlit LCD panel
- AM / FM digital tuner
- Store up to 40 stations
 Built-in amplifier and stereo speakers
- AUX in & Headphone output
 Requires 2 x AAA batteries (not included)
- Dimensions: 250(W) x 204(D) x 85(H)mm







				_
7	Cat.	Qty 1+	Qty 3+	Qty 6+
	GE-4138	\$79.00	\$70.95	\$62.95

CD PLAYER / STACKER



CD Player with 5 Disc Changer

For the serious movie and music buffs. A feature packed DVD Player that will provide you countless of hours of playback without having to change discs. It features a 5 DVD/CD changer which enable you to load 4 discs while one is playing. It also has a Karaoke function and a facility of two microphone inputs with individual level controls. It even has a USB, SD/MMC card reader for complete playback flexibility. Complete with HDMI, Component and composite video output, it also has provision for digital and analogue audio output connectivity. 240VAC Mains powered.

Dimensions: 430(W) x 100(H) x 320(D)mm



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-0489	\$349.00	\$315.00	\$279.00

PSSST! WE'VE HEARD THIS ON THE GRAPEVINE..

We've heard from a number of sources that the introduction of DAB+ radio has not been nearly as smooth as was expected. Anecdotal feedback on talkback radio has revealed many people who have purchased DAB+ sets only to find that the signal quality has not been as good as existing analogue sources. There have also been letters in technical magazines discussing this subject.

This may not be the fault of DAB+ system which is technically excellent. It may be due to the broadcaster limiting the quality of the signal being broadcasted.

We say this to you not as a criticism of DAB+ per se. it's just that we need to be realistic about radio in general. There are just too many AM & FM radios out there for the government to start talking about closing down AM & FM stations so, we believe that you should not be particularly concerned about "obsolescence" issues when choosing a radio for your needs, especially shortwave models.

DID YOU KNOW...

Fritz Pfleumer (1881 - 1945) Is accredited with inventing the Audio Tape and Emil Berliner (1851 - 1929) **Invented the Record Player**

WORLD BAND RADIOS

Radio Receiver AM/FM/SW with LCD and Clock

This multi-band pocket radio has a large backlit LCD. It features full clock functions with an alarm and receives AM, FM and SW. It can be either battery or mains powered (batteries and power supply sold separately), has a 3.5mm headphone socket and comes



Specification	5
Power	4.5VDC mains plugpack or 2 x AA batteries
AM	531-1602kHz
FM	87.2-108.8MHz
MW	517MHz - 1625kHz
SW	5.85-19MHz
Dimensions	112(H) x 70(W) x 24(D)mm

FM RADIO

USB Rechargeable Portable Mini FM Radio with MP3 Player

Compact, portable FM radio with built-in MP3 player. Listen to your favourite FM stations or your favourite MP3 tracks through the Micro SD card slot. No need to buy batteries, it has a built-in rechargeable Li-ion battery inside and charges via USB.

- Supports MicroSD card
- Built-in high quality rechargeable Li-ion battery
 USB cable included

Specifications

Plays FM radio Frequencies 87.5 - 108MHz
Output 2WRMS, THD = 10% Output 91(L) x 54(H) x 20(W)m





MP3 PLAYER

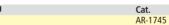
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AR-1738	\$19.95	\$17.70	\$15.70

AM/FM World Band Receiver

A truly portable world radio that is designed for functionality and ease of use. The receiver covers the standard AM/FM bands as well as the short wave bands from 2,300kHz to 22,000kHz. The tuner uses Phase Locked Loop (PLL) technology which ensures rock-steady, drift free reception even with weaker signals. This is an excellent radio that will perform well for years to come.

- 200 programmable memory bank backed up with EEPROM memory
- Sleep function up to 90mins
- 16 Level volume control
- Dual alarm modes: alarm to radio and alarm to buzzer
- 8 Second LCD back light
- Manual, auto, preset or direct frequency input station search
- Low voltage indicator Lock button
- Requires 3V DC power
- adaptor or 2 x AA batteries





lit LCD displaying the frequency, clock, battery level and signal strength indictor. Other features includes AM RF gain, AM bandwidth switch,

(not included) or the supplied 9V PSU. Supplied with a carry strap.

internal/external antenna switch, Local/DX antenna switch, IF out, total of 50 presets - 10 presets for each band (AM/FM/SW1/SW2/SW3), alarm function,

snooze button, button lock, and the list goes on. Power options are 6 x AA (not included) used with supplied 6 x D size battery adaptors, 6 x D batteries



World Band AM/FM/SW PLL Radio

Truly an ideal radio for the casual user and the enthusiast. It offers FM, MW(AM) stations and three Short Wave (SW) stations which range from 1,711kHz to 29,999kHz for receiving international broadcasts. The analogue tuning is assisted with a digital display and a tuning step, select fast for scrolling through the frequency or slow for that fine adjustment. Uses a Phase-Locked Loop (PLL) to ensure a stable reception. This unit is built with high performance IC's and MOSFET's that provide high sensitivity, strong anti-interference, low background noise and distortion. Includes a large back

- Large back lit LCD
- RF gain control
- · Bass & treble controls
- Key lock
- IF output
- · Line in and out
- Earphone socket
- Speaker 5W/4 ohms
 Local/DX antenna switch
- External antenna connection Internal full range speaker
- Mains or battery operated

Specifications	
FM	87.5-108.0MHz
MW(AM)	522-1620kHz (9kHz); 520-1710kHz (10kHz)
SW	1,711-10010kHz; 9,990-20,010kHz; 19,990-29,999kHz
Dimensions	310(W) x 195(H) x 100(D)mm

Qty 1+ Qty 4+ Qty 10+ \$129.00 \$115.95 \$102.95 Otv 10+ AR-1748

Freecall order hotline: 1800 022 888







Digital Audio Broadcast+ Radio

DAB+ RADIO

DAB+ Music Centre with USB & iPod® Dock

At first glance you'll find this music centre has some solid bread & butter features including a crisp blue backlit LCD panel, user-friendly controls, digital FM & DAB+ radio with autoscan preset stations, all your essential alarm clock radio functions, and impressive all-round sound preset stations, all your essential alarm clock radio functions, and impressive all-round sound performance to boot. But take an even closer look and you'll discover a stack of music connectivity options, such as an iPod® dock, USB port, SD/MMC card slot, CD player and even an auxiliary line in - making this an ideal plug-and-play platform for all your music. Enjoy crystal clear digital radio broadcasts, or listen to your MP3s directly from your SD card or USB memory stick. Charge your iPod® or iPhone® while listening to your daily podcasts, or load your CD and set your alarm so you'll awake the next morning to the sounds of your current playlist favourites. All these great entires plus much more all conveniently nacked in this con past & stylich. All these great options plus much more, all conveniently packed in this one neat & stylish system that's compact enough to keep on your desktop or bedside table.

- DAB+ & FM radio tuner
- iPod® dock, USB port, SD/MMC card slot
- CD player, aux line-in
 Plays MP3, WMA, CD-R/RW
- Backlit LCD panel with clear menu and operation display
 240VAC mains power adaptor included
- Measures 310(W) x 115(H) x 185(D)mm

Note: iPod® not included

NOT AVAILABLE IN NEW 7FALAND

7	Cat.	Qty 1+
	AR-1752	\$149.00

DAB+ Radio Component

Unlike some regions. Australia has been one of the first countries to embrace digital radio and one of the first to grab the bull by the horns and adopt the clearly superior DAB+ format. There are any number of small shelf, or kitchen bench type DAB+ radios available, but for audio buffs, there has been a distinct lack of hi-fi component DAB+ tuners available - unless you want to pay stratospheric hi-fi store prices. Designed to fit with standard size hi-fi components, this tuner offers a complete future-proof DAB+ radio solution; just sit it on top of your

Qty 1+ \$169.00

\$151.95

existing hi-fi receiver. Like all DAB+ devices, it displays program, artist, song and station information and has full preset memory functions. Not every station is currently broadcasting on digital, so there's also an FM section with station presets, auto-tuning etc. For anyone who's heard digital radio, the future is as crystal clear as the sound quality.



Stere	DAB+ FM Radio	
	n analogue radio? Upgrade to the infinitely superior DAB+ format for instar	
	ection, digital clarity, crystal clear stereo sound, zero interference as well as	s
song ar	artist information on a bigger range of stations.	

Cat.

AR-1753

6 x AA batteries required or use the included mains AC adaptor.

- DAB+ or FM
- 10 station presets
- Clock and alarm3.5mm headphone outlet
- 2 x 2WRMS output
- Dimension: 220(W) x
- 110(H) x 100(D)mm





(T)adk

Portable DAB+/FM Radio with Earphones

An ultra-compact DAB+ radio that fits in your pocket. Never miss your favourite radio stations while you run, cycle, commute or just doing day-to-day activities. Despite its miniature size, it provides excellent reception and crystal clear digital sound. Runs on 2 x AAA batteries, it is also equipped with a standard FM radio.

- Earphones includedVariable EQ
- Program lock
- Favourites memory
- Dimensions: 68(L) x 38(W) x 21(H)mm





LRAZU















\$134.95





INFORMATION ABOUT DIGITAL RADIO - DAB+

What are the benefits of digital radio?

 Digital radio gives you better sound quality than FM, and is interference-free



- Digital radios are easier to tune instead of fiddling with a dial to get the strongest frequency for a station, listeners will be able to choose a station by name from a menu, with the digital radio locking to that signal at a push of a button.
- The most amazing features lie in a digital radio's data capabilities: if the digital radio has an LCD screen it can receive information such as what song's currently playing, what station you're on, simultaneous news feeds, phone numbers that correspond to ads you're currently listening to, album art, electronic programme guides and much more. Digital radios with onboard storage allow you to pause live radio or rewind, just like a digital set top box with recorder works for digital
- · No subscription fees, no signing up, no logging in

How can you get digital radio?

 You need to buy a DAB+ radio, normal AM/FM radios will not pick up the digital signal. Not all radio stations have launched their DAB+ or extended features.

Digital Audio Broadcasting is not yet available in NZ. Therefore DAB+ products on this page are not available in NZ



Personal Speakers & Docking Stations

ACCESSORIES FOR iPOD®, iPAD®, iPHONES®

Mini MicroSD Card Speaker

Take music wherever you go with this small rechargeable active speaker. It can play MP3 files off a MicroSD card or a USB Flash drive, it can also accept line inputs from devices such as iPods®, iPads®, laptops or any audio device with a 3.5mm line out. Other features include a built-in FM radio scan and a line out to act as a personal MP3 player to your earphones. Charges via USB.



Specifications	
Output	3+3WRMS
Frequency response	150Hz - 18kHz
S/N ratio	80dB
Dimensions	74(L) x 50(W) x 52(H)mm



Qty 1+

\$149.00

Otv 2+

\$133.95

71	Cat.	Qty 1+	Qty 3+	Qty 6+
Speaker	XC-5176	\$39.95	\$35.90	\$31.90

Rechargeable Travel Speaker

A personal entertainment system with excellent sound reproduction. Listen to your music in 3D stereo sound from your iPod®, iPhone®, iPad®, Smartphone, MP3 player or



computer, or play MP3 or WMA files directly from a USB flash stick or SD memory card. It also features an FM radio with 30 channel favourites, colour LCD screen, volume control, equaliser, calendar, alarm clock, headphone output and an adjustable auto power off. The li-ion battery can be recharged via the USB port of a computer and a full charge provides about 8 hours of listening time. Supplied with 3.5mm audio cable, USB power cable, and Li-ion battery.



- Supports SD, SDHC cards up to 32GB (MMC/TF with adaptor) Equaliser modes: Normal, pop, classical, rock, gentle, jazz, bass
- Replay and Repeat modes

Specifications	
Output	2.5W x 2.5W
Speakers	2 x 1.5" with 40 x 70mm passive subwoofer
requency response	200Hz to 20kHz
Sensitivity	88dB
Neight	170gm
Dimensions	217(L) x 67(H) x 35(D)mm
	C-+ 0+- 1

TICHSIONS	217(L) X 07(11) X 33(D)111111				WARRANTY	
		Cat.	Qty 1+	Qty 4+	Qty 10+	
Speaker		XC-5175	\$49.95	\$44.90	\$39.90	
Spare Li-ion ba	ttery to suit	XC-5195	\$6.95	\$6.25	\$5.50	

Wireless 2.4GHz DIGITAL Indoor/Outdoor Stereo Speakers

Cat.

AR-1891

These stylish units are ideal for a left/right rear of a home cinema when you can't have trailing speaker wires. They are also great for outside sound for a BBQ etc. The audio transmitter is 2.4GHz DIGITAL, which ensures noise-free transmission. Range is claimed to be up to 50 metres, but lets say its really 30 to be conservative. The speakers have mood lights, but they can be switched out. Each speaker has its own power adaptor but will operate completely wirelessly for a surprisingly long time on 6 x AA compartment in their base. Batteries not supplied. The transmitter can be driven via a micro USB (which also powers it) or by a power adaptor (supplied).

Specifications	
Frequency response	20Hz - 20kHz
Operating distance	up to 50m, open area
Output power	5WRMS
Speaker measure	250(H) x 130(Dia.)mm
Dimension transmitter	90(D) v 35(H)mm



\$118.95







Wireless 2.4GHz DIGITAL Speakers with iPhone®/iPod® Dock

With built-in lights and crystal clear audio transmission, these speakers are a perfect way to set the mood for any social gathering. The base unit now allows you to dock your iPhone® or iPod®, while the 3.5mm jack remains to connect all other popular devices. Use as wireless rear speakers or take your party outdoors (IPX-3 waterproof rating) while your music player remains safe indoors. Use the remote to adjust the volume or skip to the next track without leaving your seat.

- Full range 3" speaker driver
- Powered by 6 x AA alkaline batteries (not incl) or AC/DC power adaptor

20Hz - 20kHz
up to 80m, open area
5WRMS
approx 120(L) x 76(H) x 104(W)mm
123(Dia) x 242(H)mm



7	Cat.	Qty 1+	Qty 2+	Qty 4+
	AR-1893	\$189.00	\$169.95	\$150.95

DOCKING STATIONS FOR iPOD®, iPAD®, iPHONES®

AV Docking Station for iPhone®/iPod®

This docking station allows you to connect your audio and video devices with your iPod® or iPhone®. Share and play your music, pictures and videos on your TV, monitor or home audio system. Features video output, audio jack and USB port designed to charge your device while connected. The dock also comes with a full functioning IR remote control, AV & USB power cable.

- AV output: Composite, stereo audio
- USB charge port
 Compatible with iPhone®, iPod® nano
- 2nd Gen up, iPod® touch 1st gen up

 Dimensions: 88(W) x 74(L) x 19(H)mm



Freecall order hotline: 1800 022 888

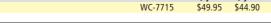
Docking Station with Audio Out for iPad®/iPhone® & iPod®

Listen to your favorite tunes off your iPad®, iPhone® or iPod® with this docking station. Connects up to powered speakers using the 3.5mm audio input to the docking station. Charge and synchronize your Apple® device to your PC or Mac simultaneously. Includes a Mini B USB lead and a 3.5mm to 3.5mm audio cable.

- Inputs: USB Mini B, 3.5mm Audio
- Supports iPad®, iPad® 2, iPhone® 3GS/4 and iPod® Touch
- Dimensions: 100(L) x 80(W) x 25(H)mm



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	WC-7718	\$49.95	\$44.90	\$39.90



CRAZ

Portable Stereo Speakers/Charger with Docking Station for iPhone®/iPod®

Portable and versatile, these speakers are suitable for use in your bedroom, study or on the go. Dock your iPhone®/iPod® into the docking station to charge and enjoy high quality stereo sound from your device. It even has a 3.5mm audio jack for use with all your other favourite personal media devices.

Completely portable, the docking cradle tucks neatly into place to avoid damage and will operate on 4XAA hatteries. An AC/DC adaptor has been included in case you run out of juice and to use the speakers as a standalone charger. t's perfect for get-togethers with

mood on that perfect picnic date.



iPhone® not included

Apple licensed product

Dual 2" full range drivers

• Total output power (RMS @ 10% THD): 4W

Power per channel: 2W

- 3.5mm jack for use with personal media players than an iPhone®/iPod®
- Includes Apple proprietary connector for data sync or charge via computer
 Accepts 4 x AAA batteries for portable use (does not charge iPhone®/iPod® in this mode)
- AC/DC adaptor for standalone charging
- Dimensions: 256(W) x 115(H) x 70(D)mm



7	Cat.	Qty 1+	Qty 2+	Qty 4+
	AR-1889	\$69.95	\$62.95	\$55.95

HDMI Docking Station for iPad® /iPhone®/iPod® with Remote

Play slideshows or movies from your Apple® device on the big screen by connecting the dock with a HDMI compatible display device. Features HDMI video output, audio jack and USB port designed to keep your device synchronised and powered for hours of entertainment. The docking station also includes a full functioning IR remote control and two silicone cases to protect your device.



- Supports up to 1080p video resolution
 Audio & USB cable included
- Compatible with iPad®, iPad2®, iPhone® 3GS/4, iPod® nano 4th Gen up, iPod® touch
- Dimensions: 72(W) x 68(L) x 28.5(H)mm





7	Cat.	Qty 1+	Qty 3+	Qty 6+
	WC-7717	\$89.95	\$80.95	\$71.95

Horn Stand Amplifier for iPhone®4

A unique and versatile iPhone®4 horn speaker amplifier. Completely passive, this moulded silicone horn amplifies the sound from your iPhone®4 up to 13dB. It also doubles as a stand which allows portrait and landscape positions and has an opening on the base to synchronise and charge your iPhone®4. Light, portable, miniature and extremely durable, take it wherever you go. Comes in white, pink, green and blue.



 Allows hands-free communication via speakerphone
Opening for charger
Washable



ERAZ

Qty 3+ Qty 6+ XC-5173 Fach \$9.95 \$8.75

Neck Strap with Earphones -Suits iPod® Nano

Fit your iPod® Nano into this compact, lightweight holder, hang it round your neck and plug-in the neatly stored headphones for true hands free action! White in colour, and compatible with iPod® Nanos.



Wireless Remote Control for iPod® & iPod® Mini

Simply plug the receiver module to your iPod® or iPod® Mini's earphone jack and control the play list or slideshows up to 10 metres away. Utilise a 3.5mm stereo lead (not included) and connect the receiver module to you Hi-Fi unit or external amplified speakers and have full remote control over your sound source.

iPod® not included • Remote requires 1 x CR2032 battery (included)

Cat. Qty 1+ AR-3119 \$6.95

iRecorder Voice Recorder Adaptor for iPod® Makes your iPod® a personal recorder!

You can record memos, lectures, interviews, or conversations simply by plugging this recorder to your iPod®. You can copy recordings to your desktop or notebook computer for storage. It attaches securely to your iPod® through a remote/headphone connector and shows the recording status with the LED indicator. No software installation is required, the support is already built in to the iPod® just plug and record! **ERRZ**9

• Supports iPod® Generation 1, 2, 3, and 4

iPod® not included

Cat Qty 1+ XC-0253 \$4.50

Speaker with Aux in for iPod® Shuffle (Gen. 2)

Specifically designed for the 2nd generation iPod® Shuffle, this stereo speaker is still ideal for use with any iPod® or MP3 player. Its 1W+ 1W output power produces quality sound, and its protective cover makes it fantastic for use at the beach.

Requires 4 x AAA batteries

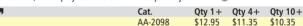
• Dimensions: 190)W) x 60(H) x 20(D)mm

Qty 1+ XC-5189 \$5.95

LEADS FOR iPOD®, iPAD®, iPHONES®

Earphones Adaptor with Mic and Control for iPhone®

Simply connect this adaptor to both your iPhone® and headphones. Someone calls during a song, with its built in mic you can answer your call without even having to take your headphones off! Simply click to answer your call or to play/pause the music. Features In line microphone and phone call control, music playback and a 3mm headphone jack



USB Charge/Sync Lead for iPad®/iPhone®/iPod®

USB charge/sync lead suitable for Apple® iPhone®, iPod® and iPad®

• Length: 1m

Qty 3+ Qty 6+ Cat. WC-7693

Retractable Lead for iPhone®/iPad®/iPod® to USB A Socket White

Full length cables become easily tangled and damaged inside bags as we carry them with us. This high quality and durable retractable lead extends to your desired length and retracts easily after you're done.

Convenient for travel

Easy to pack up and stores neatly.

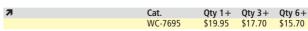
White in colour



USB Lead with 3.5mm Stereo Plug for Audio/Sync/Charge iPhone®/iPod®

A handy lead that allows you to play your iPhone®/iPod® tunes in stereo to an auxiliary input of your portable speaker, Hi-Fi system and car stereo system. It will also charge and sync your iPhone®/iPod® device by plugging the USB to an outlet or computer.

· Cable length: 1.2m





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USB Charge/Sync Lead for iPad®/iPhone®/iPod®

Replacement cables for connecting Apple's® 30 pin connector (iPod® Clickwheel, iPod® mini, iPod® Photo etc) to a Mac®

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	WC-7692	\$14.95	\$13.35	\$11.70

Audio/Video Cable for iPod®/iTouch®/iPhone®

Extend the multimedia capabilities of your Apple device by connecting it up to a large screen TV, a projector, or even your home theatre audio setup. The cable uses RCA composite video to pipe audio and video to the big screen. It also features USB for charging or connecting to a computer.

Compatible with: iPod® photo, iPod® 5th Gen, iPod® Nano 3rd & 4rd Gen, iPod® classic, iPod® touch (1st & 2ND Gen), iPhone®, iPhone® 3, iPad®



AV Component lead to suit iPod®/iTouch®/iPhone®/iPad®

Connect an Apple® device to a HDTV, projector or the home theatre system via the component RCA input. Features a USB connection to charge the Apple® device.

• Cable length: 1.5m

Compatible with: iPod® photo, iPod® 5th Gen, iPod® Nano 3rd and 4th Gen, iPod® classic, iPod® touch 1st & 2nd gen, iPhone®, iPhone® 3, iPad®



iPhone® not

7	Cat.	Qty 1+	Qty 3+	Qty 6+
Component	WC-7699	\$44.95	\$40.45	\$35.90

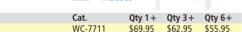
HDMI AV Cable for iPad®/iPhone®/iTouch®

Extend your multimedia capabilities with your Apple devices by connecting it to a large screen TV, projector or even your home theatre audio setup. The cable uses HDMI plug that streams audio and video to the big screen. Support movies and photo slideshows with video resolution up to 1080p.

- Compatible with iPad®1 & 2,
- iPhone®4/S, iTouch® 4th Gen
 Supports movies and slideshows
- Video resolution up to 1080p
- Cable length: 1.8m

HDMI





HDMI Converter for iPad®/iPhone®/iTouch®

Stream audio and video to your big screen TV from your Apple® device via HDMI connection. Share and play your favourite songs, videos and photos on your TV or monitor. The USB port allows you to synchronize and charge your device for non-stop entertainment.

- Supports up to 720p video resolution
 Compatible with iPad®,
 iPad®2, iPhone®4, iTouch® 4th Gen
 Dimensions: 157(L) x 116(W)mm







7	Cat.	Qty 1+	Qty 3+	Qty 6+
HDMI	WC-7713	\$64.95	\$58.50	\$51.95

AV Cable for iPod® Photo/Video

The iPod® Photo features a colour screen and can display photos on a TV. Unfortunately, no cable is supplied with the player. This cable will connect to an iPod® Photo and allow for viewing on a TV. Audio cables included for music playback during your slideshow or connecting your iPod® to a stereo for music listening.



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	WC-7694	\$9.95	\$8.75	\$7.75

DIY FOR iPOD®, iPHONES®

Tool Set Repair Kit for iPhone®

The tools you need to safely open up your iPhone® and put it back together again. Suits iPhone® 3G, 3GS & 4G.

- 2 x Plastic opening levers
- 1 x Guitar Pick Opening Tool
 1 x Pentalobe Screwdriver TS1
- 1 x Phillips Screwdriver PH00
- 1 x Suction Cap1 x Sim card ejector pin tool
- x Phone mounting bracket / Screw hold market

				шинниш
7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2112	\$12.95	\$11.35	\$10.35

MOBILE PHONE, iPOD®, GPS CHARGERS

Mains Travel Adaptors for USB, iPod® & MP3 Players

Handy for charging USB devices without needing to connect the device to your computer. Switchmode adaptor with 5VDC output and 1A max current. USB cable not included as most users will already have this but we have a range of USB cables including a model to suit the iPod[®]. Suitable for iPhone[®] and latest generation iPod[®] products including the iPhone[®] 4. The kit includes 4 interchangeable adaptors for Australia, US, UK and Europe power outlets.

Cuccifications			To Tax	P	
Specifications			11.1		
Input	100-240VAC 50/60Hz	The state of			
Output voltage	5VDC	1		CER	45
Output current					42
Size	68(L) x 55(W) x 52(H)m	m	LIEFIR	3	
			шиннишу		
Approval	No.	Cat.	Qty 1+	Qty 5+	Qty 10+
V090116		MP-3452	\$19.95	\$17.70	\$15.70

Retractable USB Multi Charger Kit

Charge a multitude of different phone or media player devices from any USB port and eliminate the need to cart a mains powered adaptor around. Ideal for students, business people or travellers. Suits just about everything, including PDAs and cameras. 15 adaptors included in the kit, covering the following models and more:

- Motorola V998, T191, V66, V3(i)
- Blackberry Nokia 8210, 6101

- Samsung A228, D800, A460 Sony Ericsson T28, K750
- LG8080, KG800
- iPod®, Nano and iPhone®
- Palm T5, Treo, 650, 700, 700W, 700p

7			Cat.	Qty 1+	Qty 5+	Qty 10+
			XC-3510	\$19.95	\$17.70	\$15.70

Car Charger/Audio Kit for iPhone®/iPod®

Suited to in-car stereo systems with 3.5mm audio-in socket to play music from popular, portable audio devices. Listen to your favourite songs from you iPhone®/iPod® using the integrated audio cable (with a 3.5mm stereo adaptor) while charging it via the supplied cigarette lighter adaptor. Lead length is 1.2m and USB output is 1A.



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	MB-3653	\$29.95	\$26.90	\$23.70

Universal Mobile Phone Charger

Charges every common mobile phone, iPhone® and the latest Nokia® models as well as some PDA and MP3 players. Includes 8 plugs to suit:

- LG Shine
- Motorola V3 Siemens C62
- Samsung D528
- Sony Ericsson W910i Nokia N-series, 3210
- Suitable for iPods® including iPod Touch®









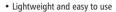


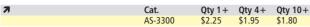
Freecall order hotline: 1800 022 888

EARPHONES

Magnetic Earpiece

Magnetic 8 Ohm earpiece with 3.5mm plug connected Suitable for radios, portable TVs, etc.





Crystal Earpiece

Crystal earpiece of high impedance with 3.5mm plug Suitable for crystal sets or for experimental use.



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AS-3305	\$5.95	\$5.25	\$4.75

Stereo Inner Ear Earphones

Low cost inner ear phones that offer superb performance. Great replacement for your tired or damaged MP3 or iPod® players.

Specifications	
Speaker Diameter	10mm
Frequency range	20Hz - 20kHz
Impedance	32 Ohms +/- 5%
Sensitivity	105dB +/- 5dB
Max power input	10mW

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2090	\$5.95	\$5.25	\$4.75

Metal Stereo Inner Ear Earphones

These inner ear earphones reproduce good quality sound and are extremely durable owing to their metal construction (excluding the cable).

Specifications	
Speaker Diameter	10mm
Frequency range	20Hz - 20kHz
Impedance	32 Ohms +/-; 5%
Sensitivity	105dB +/- 5dB
Max power input	10m

Sensitivity	105dB +/- 5dB		<i>/~ /</i>		
Max power input	10m				
7		Cat.	Qty 1+	Qty 4+	Qty 10+
		AA-2092	\$9.95	\$8.75	\$7.75

Stereo Inner Earphones with Built-in Mic

Quality stereo inner ear earphones with a built-in microphone. Enjoy hassle free music enjoyment without the inconvenience of having to remove your earphones when answering a call. Suitable for use with iPhone®s and other mobile devices where headphone mic is supported

Specifications	
Speaker Diameter	10mm
Frequency range	20Hz - 20kHz
Impedance	32 Ohms +/- 5%
Sensitivity	105dB +/- 5dB
Max power input	10mW
Mic	-58dB±3dB

		_	_	
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2096	\$9.95	\$8.75	\$7.75

Kids Earphones with Volume Limiter

These headphones have been especially designed to help prevent damage to hearing that may be caused by listening through headphones at unsafe levels. Ideal for young children or teenagers.

- · Built in volume limiter
- Maximum output level: 85dB
- Cable length: 1.2m Jack: 3.5mm

		100		
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AS-2084	\$9.95	\$8.75	\$7.75

Secure Clip On Earphones

These little beauties will stay put even when you are running or working out at the gym.

- 20 20kHz frequency response
- 96dB sensitivity
 32 Ohms impedance
- 3.5mm stereo plug

		,	ı	1
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2023	\$14.95	\$13.35	\$11.70

High Quality Stereo Inner Ear Earphones

Using dynamic drivers these inner ear earphones provide better bass response and thus a more harmonious listening experience.





EIB

210

71	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2094	\$24.95	\$22.35	\$19.70

WIRELESS EARPHONES

USB Bluetooth® Handsfree Stereo Earphones

Listen to your iPod® or MP3 player without missing a call from your mobile phone. This tiny device will allow you to answer, hang up and swap between your music source and mobile handset as well as adjusting the volume. It connects to the headphone jack of your iPod® or music source and will cut out the music to allow the call to be taken. It's light weight, has a tie clasp clip, charges via an USB port and features backlight buttons for use at night.

- Supplied with a 1.5m USB lead, 730mm sound source interface lead and bud-style earphones
 Dimensions: 50(H) x 25(W) x 11(D)mm
- Battery: Non replaceable Lithium-ion rechargeable

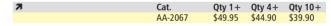
Qty 1+ XC-4894

Bluetooth® Stereo Headset

Join the trend but stand out with this sleek and stylish in-ear Bluetooth stereo headset. It is easily paired with any Bluetooth device such as a mobile phone or computers. Extremely light and comfortable, it has a flexible and soft design which allows you

nexible and soft design which allow: to enjoy your music without fatigue. Microphone for Bluetooth hands-free capability and lithium-ion rechargeable batteries which will provide hours of use.

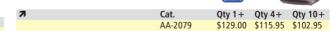
· USB charging cable included.



TV Hearing Aid Earphones

A lightweight TV hearing aid with comfortable ear inserts. It uses noise cancelling technology to reduce background noise and features voice clarification technology so you don't miss any of dialogue in your favourite TV show, news broadcast or movie. A tone control button allows adjustment for different frequency hearing abilities and can be connected either directly to the TV or a digital set-top box. When not in use the cradle charges the batteries.

- Tone control
- Balance control
 Auto power off function for transmitter
- Several users can listen from one receiver
- Battery life: 12 hours Headphone dimensions: 195(H) x 138(W)mm
- Receiver dimensions: 120(W) x 97(L) x 18(H)mm



EARPHONES ACCESSORIES & SPARES

Earphone Replacement Pads

Earphone Foam Replacement Pads, 6 black sponge pads, for replacing soiled ones on earphones.



7	Cat.	Qty 1+	Qty 4+	Qty 10+
Small - 17mm	AA-2013	\$2.95	\$2.60	\$2.30



HEADPHONES

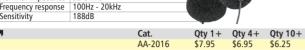
Ultra Light Stereo Headphones

Quality headphones at a budget price

- Terminates to a 3.5mm stereo plug with adaptor to 6.5mm supplied.

 • Spare set of muff pads included.

Specifications	
Driver diameter	27mm
Power handling	100mW
Nominal impedance	32 Ohms
Frequency response	100Hz - 20kHz
Sensitivity	188dB



Kids Stereo Headphones with Volume Limiter

These earphones are perfect for young children or teenagers. Not only do they look funky but they are very comfortable, adjustable and lightweight. The volume limiter allows you be sure it wont go any higher than a maximum output level of 85dB. A great safety feature to protect your child's ears.



20U

Maximum output level: 85dB



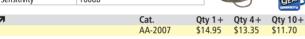
71	Cat.	Qty 1+	Qty 4+	Qty 10+
	AS-2086	\$14.95	\$13.35	\$11.70

Lightweight Heavy Bass Stereo Headphones

Designed for extra bass performance.

- Fully adjustable headband & speakers

 Supplied with 3.5m 	m plug and 6.5mm adaptor
Specifications	
Driver diameter	34mm
Power handling	100mW
Nominal impedance	32 Ohms
Frequency response	20Hz - 20kHz
Sensitivity	100dB
_	



High Quality Lightweight Stereo Headphones

Tipping the scales at a meagre 80 grams, these lightweight stereo headphones provide outstanding performance, clarity and comfort. Featuring high output drivers with neodymium magnets, they produce crystal clear sound with crisp highs and smooth bass response.

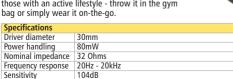
• Soft leatherette swivel ear pads, adjustable headset and 1.2m lead.

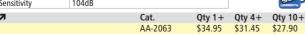
30mm
50mW
32 Ohms
15Hz - 20kHz
107dB

ıse	15Hz - 20kHz	SELLE	N		
	107dB				LIEAR
					WARRANTU
		Cat.	Qty 1+	Qty 4+	Qty 10+
		AA-2061	\$24.95	\$22.35	\$19.70

High Quality Full Cup Stereo Headphones

Sheer noise-free audio pleasure has never been this affordable and even the most discerning audiophile will be impressed by the crystal clear sound clarity and dynamic range delivered by these premium headphones. Featuring swivelmounted padded full cups, adjustable headset and 2m cord, they're designed for portability, comfort and performance. A great travelling companion for those with an active lifestyle - throw it in the gym





Pro Monitor Stereo Headphones

Affordable professional headphones that offers outstanding performance for home and studio applications. Provides accurate, linear sound reproduction to cater for the most demanding monitoring applications. Integrated 42mm drivers give excellent bass response with the added comfort of ear cushions to provide hours of fatigue-free listening. Cable length 3m and it has



Qty 1+ \$79.95 Cat. AA-2065

CRAZU

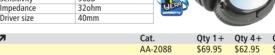
NOISE CANCELLING HEADPHONES

Active Noise Cancelling Headphones with Built-in USB Rechargeable Batteries

Suitable for frequent flyers and travellers, these active noise cancellation headphones will reduce your background noise by up to 16dB, allowing you to relax and enjoy high quality digital stereo sound from your in-flight entertainment or personal media player. They reduce cabin noise or your exposure to low-frequency sounds helping you to manage your fatigue while travelling. The ear cups rotate for compact size and easy storage inside your hand-carry bag or seat pocket. Supplied with built-in rechargeable batteries, which is charged through the USB cable provided.

- High quality digital stereo soundActive noise cancellation receiver
- Reduces noise by 16dB
- Built-in rechargeable battery
- Airplane adaptor • 3.5mm to 6.5mm adaptor
- USB charge cable
- 3.5mm stereo audio cable

Specifications		
Frequency response	15Hz - 25kHz	
Distortion	0.1%	
Sensitivity	96dB	(
Impedance	32ohm	
Driver size	40mm	



HEADPHONE ACCESSORIES

Aeroplane Headphone Adaptor

Use your own headphones in an aeroplane. 3.5mm stereo socket to 2 x 3.5mm mono plug. Aeroplane adaptor - allows you to use your own headphones in planes fitted with 2 x 3.5mm sockets.

7	Cat.	Qty 1+	Qty 10+	Qty 50+
	DA 2501	¢5 05	¢5 25	¢175

3.5mm Stereo Plug to 3.5mm Stereo Socket



Length

6.0m



7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	3.0m	WA-7010	\$6.95	\$6.25	\$5.50
	Curly 3.0m	WA-7012	\$8.50	\$7.50	\$6.75
	5.0m	WA-7011	\$9.95	\$8.75	\$7.75

Curly Extension Lead 6.5mm Stereo Plug to 6.5mm Stereo Socket - 6m



Headphones – Wireless & Amplifiers

WIRELESS HEADPHONES

Wireless Infrared Stereo Headphones

A great pair of entry-level wireless headphones. Setup is quick and easy and the sound clarity is excellent. The ultra-light design allows them to sit so comfortably on your head you'll hardly believe there is anything there. With a range of about 10m and the ability to use one transmitter for multiple headphones, this unit is perfect for a variety of audio experiences. Wirelessly connects with any TV, VCR, VCD, DVD, Computer, MP3 player or audio system.

- Built-in 30mm Mylar speaker and auto mute
- · Active noise reduction system for crystal clear sound
- Volume control on headphones
 Several headphones can be used simultaneously with one transmitter
- Headphones require 2 x AAA batteries



Specifications		
Driver diameter	30mm	_
Frequency response	30Hz - 20kHz	Tribin &
Signal to Noise Ratio	75dB	THE THE PERSON NAMED IN COLUMN
Transmission mode	Infrared	Allo A
Transmision range	10m	133
Batteries	2 x AAA	10333
0 11 11 1	Up to 10m with latest	31416
Operation distance	infrared wireless technology	

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2049	\$49.95	\$44.90	\$39.90

Hi-Fi Stereo Bluetooth® Headset

The ultimate in multi-functional headphones with Bluetooth® and genuine hands-free profile with the ability to listen to MP3 music from a mobile phone or a PC. Crystal clear sound using digital sound processing and built in CVC (clear voice capture) to eliminate noise while talking. A quality full cup headset with soft touch leatherette finish, and rechargeable Li-Po battery. Allows multiple device connection, perfect for the commuter, student, or multi-tasker.

- Bluetooth®
- Multipoint Support: 2 connections
- simultaneously Supports A2DP, AVRCP, headset,
- hands free profile Faster connecting, clear sound,
- interference free listening

 Low battery LED and audio indication

2011 Sutterly 225 and	addio marcation
Specifications	
Working range	up to 10 metres
Bluetooth® version	V2.1
Max Working Time	30 hours
Max Standby Time	100 hours
Power	Rechargeable Li-Polymer battery (recharge via 240V power cable)

'	·			WARRANTU
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2082	\$69.95	\$62.95	\$55.95

900MHz Wireless Stereo **Headphones with FM Radio**

Wireless headphones with built-in rechargeable Li-ion batteries offers complete wireless musical enjoyment throughout the home or office. Designed to receive high-quality stereo sound from any audio devices such as computer, TV, DVD/CD players, Hi-Fi unit etc. It also features a built-in FM radio that allows you to scan through your favourite radio stations. The transmitter is powered through the mains power adaptor (included) and 3 x AAA batteries (not included). The transmitter base also acts as a charging station for the headphones.

Pack includes: Headphones (receiver), transmitter base, 3.5mm to 3.5mm audio cable, 3.5mm to RCA adapter cable, power supply & user's manual.

Specifications	
Frequency response	22 - 20 kHz
Signal to noise ratio	50dB
R/L channel separation	30dB
Transmission range	15m
Dimensions	
Base	215(W) x 68(H) x 135(D)mm
Headphones	205(W) x 200(H) x 85(D)mm

AA-2071

2.4GHz Digital Wireless Headphones with FM Radio

2.4GHz digital wireless headphones with built-in rechargeable Li-ion batteries for wireless music enjoyment throughout the house. Designed to receive high quality stereo sound from any audio device such as a computer, TV, Hi-Fi unit, etc. Features two selectable operating modes: wireless headphones for personal audio or your favorite FM radio station using the scan

The transmitter runs from either the supplied plug pack, which also acts as a charging base for the headphones or by 3 x AAA batteries (not included). Up to 8 hours of continuous use

Specifications	
Frequency response	22 - 20 kHz
Signal to noise ratio	50dB
R/L channel separation	30dB
Transmission range	50m
Carrier frequency	2.40 - 2.48GHz
Modulation	Digital
Max transmission	9.9dBm
Radio tuning band	FM: 87.5MHz to 108MHz
Broadband	
characteristics	327mV
voltage	
Dimensions	
Cradle	215(W) x 134(H) x 73(D)mm
Cradle & Headnhones	216(W) x 237(H) x 134(D)mm

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2073	\$99.00	\$88.95	\$78.95

HEADPHONE AMPLIFIERS

Portable Headphone Amplifier

This incredibly tiny and simple headphone amp adds higher sound quality to your portable setup. Powered by one AAA battery and sporting only a 3.5mm input and output jack that connects to headphones of an MP3 player. A red LED lights up when phones are plugged in, indicating that the amp is active. Designed for high impedance and low sensitivity headphones, boost the volume and experience higher quality bass on the go.

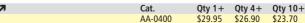
Enseifications	
Specifications	
Output Power	12mW - 70mW
Suitable H'phone Impedance	16ohm - 300ohm
Requires	1 x AAA battery, for 20 hours playtime
Dimensions	55(L) x 23(W) x 14.5(H)mm

Qty 10+ AA-0407

3 Channel Headphone Amplifier

This economy headphone amplifier is designed to allow up to three people to listen to the same music source on three separate sets of headphones. The unit has a master volume control and is fitted with a 2.5m long input cable that is terminated with RCA connectors. Output is via 3 \times 6.3mm headphone sockets and

• 5.5 Steleo to	2 x NCA adaptor ilicidded
Specifications	5
S/N	>65dB
Requires	6VDC power source
Dimensions	128(W) x 46(H) x 63(D)mm

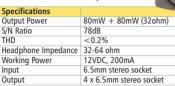




4 Channel Headphone Amplifier

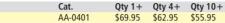
Allows up to four people to listen to the same music source on four separate headphones, without any audio loss you would experience using a passive splitter. Suitable for a range of applications including retail,

education, office or for the home where kids can each have their own headset. Each output has its own volume control and the protective side rubber guards can be removed. Supplied with an AC power adaptor and a stereo 6.5mm to RCA adaptor.



See page 258 for another 4 channel amp

RELATED PRODUCT

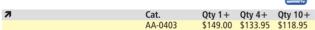


10 Way Headphone Listening Centre with Microphone Designed to distribute audio signals across up to 10 headphones. Unit has a built-in amplifier which prevents loss of sound quality. Each output has its own volume control to meet individual listening requirement. Inputs

are through 3.5mm microphone and 6.5mm line sockets, making this listening centre ideal for language translations during conferences or meetings and headphone testing bays in a retail store.

Supplied with a mains power adaptor, 1 x dynamic microphone and 1 x 2 metre 3.5mm plug to 6.5mm plug stereo lead suitable for the line input.

Specifications	
Output power	220mW (32ohm)
S/N ratio	60dB
Headphone Impedance	16-64 ohm
Working power	12V, 300mA
Dimensions	191(W) x 95(H) x 45(D)mm



PILLOW SPEAKERS

Pillow Speakers

A safe and convenient alternative to headphones or earphones whilst listening to music in bed. Simply plug in an MP3 player, iPod® or radio and place into a pillow case. Perfect for children and adults alike. 1m lead with 3.5mm stereo plug included. No batteries required.

• 1m removable cable with 3.5mm plug

Specifications	
Impedance	16 ohm @ 1kHz
Rated power	0.1W
Maximum power	0.6W
Resonance frequency	500Hz ± 20%

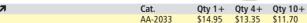
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AS-3029	\$9.95	\$8.75	\$7.75

MICROPHONE HEADSETS

Computer Headphones with Flexible Microphone Boom

Comfortable and lightweight at only 48 grams for hours of gaming or podcasting. The lead is terminated in separate mic and speaker jacks for computer use and is a generous 2m long so you don't decapitate yourself while reaching for your 43rd cup of coffee.

27mm
100mW
320 ohms
100Hz - 20kHz
100dB



USB Stereo Headset with Microphone

A true plug and play headset! It simply plugs into your computer's USB port and delivers excellent sound quality across all music styles. The 38mm drivers ensure solid bass while maintaining a balanced response all the way up to 20kHz. The sensitive electret microphone is fitted to a flexible gooseneck and is fully adjustable.

Perfect for gaming and VoIP communicationUSB 2.0 compliant

32 ohm
38mm
20Hz - 20kHz
-65dB
Cardioid

Cat. Qty 10+ AA-2032 \$34.95 \$31.45

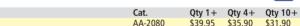
Rechargeable Bluetooth® Headset with Mic

Lightweight Bluetooth® headset that can be connected with two Bluetooth® devices at the same time. Talk hands-free while driving, or connect to your Bluetooth® enabled PC or PS3® for hands-free chatting

on Skype®, MSN® and other chat programs. Features antinoise technology for crystal clear conversation, multifunction button for voice command, last number redial, call rejection, and adjustable volume. The built-in Li-Po battery charges from a USB port (USB cable included). Compatible with all Bluetooth® mobile phones and Smartphones.

- Bluetooth® V2.1 with 10m range
- Supports 2 multipoint connections Mono Smartphone friendly
- 3 hour charge time 13 hour usage time
- 220 hour standby time
- Built in rechargeable Li-Po Battery
- Weight: 42g



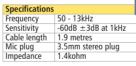


LRAZ

MICROPHONES - COMPUTER

Computer Microphone

This omni - directional condenser microphone supplied with a small bracket which will mount on your monitor and it incorporates a lapel clip for wearing.



Cat. Qty 1 AM-4081

Desktop Multimedia Microphone

Ideal for voice recognition software or simply recording voice and sound. This microphone can sit on your desktop or can be attached to your computer monitor. It produces low noise and has a wide frequency response.

Specifications	
Directionality	Omni directional
Sensitivity	-62dB -/+ 3dB
Impedance	Low
Frequency	20Hz-16kHz
Cable length	3m
Operating voltage	1V-10V
Mic plug	3.5mm



AM-4087 \$12.95 \$11.35

50UN

Audio Cable Selection Guide

Use	Quality	Conn	ector	to	Connect	or	Length	Cat.	Page
Audio	Best	Stereo 3.5	Plug		RCA x 2	Plug	1.5m	WQ-7206	230
Audio	Best	Stereo 3.5	Plug		RCA x 2	Plug	3.0m	WQ-7208	230
Audio	Best	RCA x 2	Plug		RCA x 2	Plug	1.5m	WQ-7226	230
Audio	Best	RCA x 2	Plug		RCA x 2	Plug	3.0m	WQ-7228	230
Audio	Best	RCA x 2	Plug		RCA x 2	Plug	5.0m	WQ-7230	230
Audio	Best	RCA x 2	Plug		RCA x 2	Plug	10.0m	WQ-7232	230
Audio	Best	XLR 3 PIN	Plug		XLR 3 PIN	Socket	2.0m	WA-7041	232
Audio	Best	XLR 3 PIN	Plug		XLR 3 PIN	Socket	6.0m	WA-7042	232
Audio	Best	XLR 3 PIN	Plug		XLR 3 PIN	Socket	10.0m	WA-7043	232
Audio	Good	DIN 5 Pin	Plug		5 Pin DIN	Plug	1.5m	WA-7000	232
Audio	Good	DIN 5 Pin	Plug		RCA x 4	Plug	1.5m	WA-7002	232
Audio	Good	Stereo 2.5	Plug		Stereo 3.5	Plug	1.5m	WA-7004	232
Audio	Good	Mono 3.5	Plug		Mono 3.5	Plug	1.5m	WA-7006	232
Audio	Good	Stereo 3.5	Plug		Stereo 3.5	Plug	0.5m	WA-7007	232
Audio	Good	Stereo 3.5	Plug		Stereo 3.5	Plug	1.5m	WA-7008	232
Audio	Good	Stereo 3.5	Plug		Stereo 3.5	Plug	3.0m	WA-7009	232
Audio	Good	Stereo 3.5	Plug		Stereo 3.5	Plug	5.0m	WA-7005	232
Audio	Good	Stereo 3.5	Plug		Stereo 3.5	Socket	3.0m	WA-7006	232
Audio	Good	Stereo 3.5	Plug		Stereo 3.5	Socket	3.0m Curly	WA-7012	232
Audio	Good	Stereo 3.5	Plug		Stereo 3.5	Socket	5.0m	WA-7011	232
Audio	Good	Stereo 3.5	Plug		RCA x 2	Plug	1.5m	WA-7014	232
Audio	Good	Stereo 3.5	Plug		RCA x 2	Plug	3.0m	WA-7015	232
Audio	Good	Stereo 3.5	Plug		RCA x 2	Plug	5.0m	WA-7017	232
Audio	Good	Stereo 3.5	Plug		RCA x 2	Socket	300mm	WA-7016	232
Audio	Good	Mono 6.5	Plug		Mono 6.5	Plug	3.0m	WA-7024	232
Audio	Good	Mono 6.5	Plug		Mono 6.5	Plug	6.0m Curly	WA-7026	233

Use	Quality	Coi	nector to	Connect	or	Length	Cat.	Page
Audio	Good	Mono 6.5	Plug	Mono 3.5	Socket	5.0m	WA-7030	232
Audio	Good	Mono 6.5	Plug	XLR	Socket	6.0m	WA-7040	232
Audio	Good	Stereo 6.5	5 Plug	Stereo 6.5	Socket	6.0m Curly	WA-7046	233
Audio	Good	RCA	Plug	RCA	Plug	1.5m	WA-7050	232
Audio	Good	RCA	Plug	RCA x 2	Plug	1.5m	WA-7054	232
Audio	Good	RCA	Plug	RCA x 2	Socket	300mm	WA-7056	232
Audio	Good	RCA x 2	Plug	RCA x 2	Plug	1.5m	WA-7062	232
Audio	Good	RCA x 2	Plug	RCA x 2	Plug	3.0m	WA-7064	232
Audio	Good	RCA x 2	Plug	RCA x 2	Plug	5.0m	WA-7066	232
Audio	Good	RCA x 2	Plug	RCA x 2	Plug	10.0m	WA-7068	232
Audio	Good	RCA x 2	Plug	RCA x 2	Socket	1.5m	WA-7070	232
Audio	Good	RCA x 2	Plug	RCA x 2	Socket	3.0m	WA-7072	232
Audio	Good	RCA x 2	Plug	RCA x 2	Socket	5.0m	WA-7074	232
Audio	Good	RCA x 4	Plug	RCA x 4	Plug	1.5m	WA-7078	232
Audio	Good	RCA x 4	Plug	RCA x 4	Plug	5.0m	WA-7080	232
Audio	Good	RCA	Plug	RCA	Socket	3.0m	WA-7084	232
Audio	Good	RCA	Plug	Mono 3.5	Plug	1.5m	WA-7088	232
Audio	Good	RCA x 2	Piggyback	RCA x 2	Plug	1.5m	WA-7090	232
Audio	Good	RCA x 2	Piggyback	RCA x 2	Plug	3.0m	WA-7091	232
Audio	Good	RCA x 2	Piggyback	RCA x 2	Plug	5.0m	WA-7092	232
Audio	Good	RCA x 2	Piggyback	RCA x 2	Plug	10.0m	WA-7093	232
Audio	Good	RCA	Socket	RCA x 2	Plug	300mm	WA-7058	232
Audio	Good	Speakon	Plug	Speakon	Plug	5m	WA-7100	233
Audio	Good	Speakon	Plug	Speakon	Plug	10m	WA-7102	233
Audio	Good	Speakon	Plug	Speakon	Plug	15m	WA-7104	233
Audio	Good	Speakon	Plug	Speakon	Plug	20m	WA-7110	233
Audio	Good	XLR	Plug	XLR	Socket	6.0m	WQ-7292	233
Audio	G000	XLK	Plug	XLK	Socket	b.Um	WQ-7292	

AUDIO LEADS

Audio leads shown on this page are packaged in handy hanging storage blister display packs except where stated.

1.5m WA-7000 \$6.95



3.5mm STEREO PLUG TO 3.5mm STEREO PLUG



TO 2 X RCA PLUGS

3.5mm STEREO SOCKET



Qty 1+ 300mm WA-7018 \$5.50 \$4.90 \$4.30

RETRACTABLE LEAD 3.5mm PLUG TO 3.5mm PLUG Cable retracts for easy storage

• 1.0m long.

Z Length Cat.



Otv 6+

\$6.75

\$7.75

Qty 10+

\$4.95

\$6.95

\$7.75

Qty 1+

Qty 1+ Qty 4+ Qty 10+ Z Length Cat. 3.0m WA-7024 \$6.95

5 PIN DIN PLUG TO 4 X RCA PLUGS

Length Cat.

5 PIN DIN PLUG

TO 5 PIN DIN PLUG



\$6.25

Qty 4+ Qty 10+

\$5.50

3.5mm STEREO **PLUG TO 3.5mm** STEREO SOCKET

1.0m WC-7732 \$14.95

Length Cat. Qty 10+ Qty 1+ Qty 4+

\$7.50

\$8.75

6.5mm MONO PLUG TO 6.5mm MONO SOCKET

6.5mm MONO **PLUG TO 3 PIN XLR** SOCKET

↗ Length Cat.

TO 3 PIN XLR SOCKET

6.5mm MONO PLUG

PLUG

TO 6.5mm MONO R/A



Z Length Cat. Qty 4+ Qty 10+ Qty 1+ 5.0m WA-7030 \$8.95 \$7.95 \$6.95



3.0m WA-7010 \$6.95 Curly3.0m WA-7012 \$8.50 5.0m WA-7011 \$9.95 3.5mm STEREO PLUG

TO 2 X RCA PLUGS

5.0m



Qty 10+

\$9.50

\$15.70

\$18.95

6.0m WA-7040 \$19.95 **3 PIN XLR TYPE PLUG**

3.5mm MONO PLUG TO 3.5mm **MONO PLUG**

7 Length Cat.



Qty 1+ Qty 4+ 7 Length Cat. Qty 10+ 1.5m WA-7006 \$4.95 \$4.45 \$3.90

Qty 1+

Length Cat. Qty 1+ Qty 4+ WA-7014 \$6.50 1.5m \$5.75 WA-7015 \$8.95 \$7.95 3.0m

WA-7017 \$9.95

↗ Length Cat. Qty 1+ Qty 4+ 2.0m WA-7041 \$11.95 \$10.70 WA-7042 \$19.95 \$17.70

2.5mm STEREO PLUG TO 3.5mm STEREO PLUG



Qty 1+ Qty 4+ 7 Length Cat. Otv 10+ 1.5m WA-7004 \$4.95 \$4.45 \$3.90

3.5mm STEREO PLUG TO **2 X RCA SOCKETS**



\$8.75

Qty 1+ Qty 4+ Qty 10+ Length Cat. 300mm WA-7016 \$5.50 \$4.90 \$4.30

10.0m WA-7043 \$23.95 **RCA PLUG TO RCA PLUG**



\$21.35

Length Cat. Qty 4+ Qty 10+ Qty 1+ 1.5m WA-7050 \$5.95

AUDIO LEADS (CONTINUED)

RCA PLUG TO 2 X RCA PLUGS



Length Cat. Qty 1+ Qty 4+ Qty 10+ 1.5m WA-7054 \$5.95 \$5.25 \$4.75

RCA PLUG TO



7 Length Cat. Qty 1+ Qty 4+ Qty 10+ WA-7084 \$6.50 \$5.75

SPEAKON LEAD

EXTENDER

Connects Speakon leads together to extend cable runs as far as you need to. ABS construction.



Qty 1+ Qty 10+ Qty 50+ Cat PA-3689 \$11.35 \$10.35

2 X RCA PLUGS TO 2 X RCA SOCKETS



7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.5m	WA-7070	\$6.50	\$5.75	\$4.95
	3.0m	WA-7072	\$9.50	\$8.50	\$7.50
	5.0m	WA-7074	\$11.95	\$10.70	\$9.50

RCA PLUG TO 3.5mm PLUG



Qty 1+ Qty 4+ Qty 10+ 7 Length Cat. 1.5m WA-7088 \$4.95 \$4.45

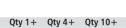
2 X BANANA PLUG

TO 2 X BANANA PLUG

Heavy duty figure-8 speaker cable with transparent PVC jacket. Gold-plated screwlock banana plugs. Red & black plug IDs.

• 5.0m





WA-7110

\$29.95 \$26.90 \$23.70

RCA PLUG TO 2 X RCA SOCKETS



Length Cat. Qty 1+ Qty 4+ Qty 10+ 300mm WA-7056 \$4.95

Full range of RCA plugs, sockets

& adaptors see page 176

RELATED PRODUCT

SPEAKON AUDIO LEADS



7	Cat.	Qty 1+	Qty 4+	Qty 10+
5.0m	WA-7100	\$29.95	\$26.90	\$23.70
10.0m	WA-7102	\$49.95	\$44.90	\$39.90
15.0m	WA-7104	\$69.95	\$62.95	\$55.95
20 0m	WA-7106	\$99.00	\$88.95	\$78.95

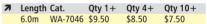
7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+					
	1.5m	WA-7078	\$8.50	\$7.50	\$6.75					

5.0m WA-7080 \$14.95 \$13.35 \$11.70

INSTRUMENT LEADS

CURLY INSTRUMENT EXTENSION LEAD 6.5 STEREO PLUG TO 6.5 STEREO SOCKET 6M

Curly Instrument Extension Lead 6.5 Stereo Plug to 6.5 Stereo Socket 6m



1 X RCA SOCKET TO

2 X RCA PLUGS



Qty 1+ Qty 4+ Qty 10+ 7 Length Cat. 300mm WA-7058 \$4.95 \$4.45

4 X RCA PLUGS TO 4 X RCA PLUGS

installing a system they're the only way to

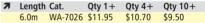
go. You could buy the cable and connectors and put them together, or buy these excellent ready-made cables.

~	Cat.	Qty I +	Qty 4+	Qty 10+
5.0m	WA-7100	\$29.95	\$26.90	\$23.70
10.0m	WA-7102	\$49.95	\$44.90	\$39.90
15.0m	WA-7104	\$69.95	\$62.95	\$55.95
20.0m	WA-7106	\$99.00	\$88.95	\$78.95

CURLY INSTRUMENT LEAD 6.5 MONO PLUG TO 6.5 MONO PLUG 6M

6.5 - 6.5mm mono plug to plug curly cord instrument lead. Suitable for all musical instrument applications.





2 X RCA PLUGS TO 2 X RCA PLUGS



7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.5m	WA-7062	\$6.95	\$6.25	\$5.50
	3.0m	WA-7064		\$7.95	\$6.95
	5.0m	WA-7066	\$10.95	\$9.75	\$8.75
	10.0m	WA-7068	\$13.95	\$12.35	\$10.95

SPEAKON LEAD SPLITTER 2 WAY

An adaptor that will split your stereo 4 core Speakon cable run to 2 x 2 pole left and right channels. A solution that cuts down on cable runs and costs dramatically

• 1 x 4 pole Speakon plug to 2 x 2 pole Speakon plugs. Length 300mm.

300mm WA-7109 \$24.95 \$22.35

AMPHENOL INSTRUMENT CABLE 6 METRE

Suitable for guitar, bass or keyboard applications.
Terminated with pro quality strain-relieved Amphenol 6.5mm plugs, 180 degree one end, right angle on the other.

Gold plated. **Amphenol**



Length Cat. Qty 1+ Qty 4+ Qty 10+ 6.0m WQ-7290 \$34.95 \$31.45

PIGGYBACK 2 X RCA TO RCA LEAD

Piggyback 2 x RCA to RCA audio lead 1.5m



7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.5m	WA-7090	\$9.50	\$8.50	\$7.50
	3.0m	WA-7091	\$11.95	\$10.70	\$9.50
	5.0m	WA-7092	\$13.95	\$12.35	\$10.95
	10.0m	WA-7093	\$22.50	\$19.95	\$17.95

6.5MM MONO TO SPEAKON CABLE - 3M Stage quality 6.5mm mono to Speakon cable for

connecting small PA systems. 3m, super flexi cable.



7 Length Cat. Otv 1+ Otv 4+ Otv 10+ WA-7108 \$16.95 \$14.95 \$13.35

AMPHENOL BALANCED MICROPHONE CABLE Professional quality mic

cable terminated with strain-relieved Amphenol connectors

XLR female.

XLR male to Amphenol

Otv 1+ 6.0m WQ-7292 \$44.95 \$40.45

Video Cable Selection Guide

Use	Quality	Co	nnector	to Conne	ctor	Length	Cat.	Page	Use	Quality	Con	nector	to Connec	tor	Length	Cat.	Page
Video	Best	Coaxial	Plug	Coaxial	Plug	1.5m	WQ-7200	230	Video	Best	HDMI	Plug	HDMI	Plug	5.0m	WQ-7403	235
Video	Best	Coaxial	Plug	Coaxial	Socket	1.5m	WQ-7202	230	Video	Best	DVI-D	Plug	HDMI	Plug	1.5m	WQ-7407	236
Video	Best	S-Video	Plug	S-Video	Plug	1.5m	WQ-7214	230	Video	Best	DVI-D	Plug	HDMI	Plug	3.0m	WQ-7406	236
Video	Best	S-Video	Plug	S-Video	Plug	3.0m	WQ-7216	230	Video	Best	HDMI	Plug	HDMI	Plug	15.0m	WQ-7408	235
Video	Best	S-Video	Plug	S-Video	Plug	5.0m	WQ-7217	230	Video	Best	HDMI	Plug	HDMI	Plug	20m	WQ-7409	235
Video	Best	S-Video	Plug	S-Video	Plug	10.0m	WQ-7220	230	Video	Good	HDMI	Plug	Micro D	Plug	2.0m	WQ-7911	235
Video	Best	RCA	Plug	RCA	Plug	0.5m	WQ-7221	230	Video	Best	Display Port	Plug	HDMI	Socket	0.15m	WQ-7412	235
Video	Best	RCA	Plug	RCA	Plug	1.5m	WQ-7222	230	Video	Best	DVI-D Mini	Plug	HDMI	Plug	0.36m	WQ-7422	235
Video	Best	RCA	Plug	RCA	Plug	3.0m	WQ-7223	230	Video	Best	Display Port	Plug	HDMI	Socket	0.15m	WQ-7423	235
Video	Best	RCA	Plug	RCA	Plug	5.0m	WQ-7224	230	Video	Best	D15HD	Plug	D15HD	Plug	5.0m	WC-7588	312
Video	Best	RCA	Plug	RCA	Plug	10.0m	WQ-7225	230	Video	Best	SMA	Plug	SMA	Plug	1.0m	WC-7800	231
Video	Best	RCA x 2	Plug	RCA	Plug	0.5m	WQ-7227	230	Video	Best	SMA	Plug	SMA	Plug	3.0m	WC-7802	231
Video	Best	RCA x 3	Plug	RCA x 3	Plug	1.5m	WQ-7238	230	Video	Best	SMA	Plug	SMA	Plug	5.0m	WC-7804	231
Video	Best	RCA x 3	Plug	RCA x 3	Plug	0.5m	WQ-7239	230	Video	Best	FME	Plug	FME	Socket	5m	WC-7820	231
Video	Best	RCA x 3	Plug	RCA x 3	Plug	3.0m	WQ-7240	230	Video	Best	F Plug	Plug	F Plug	Plug	1.5m	WV-7390	231
Video	Best	Scart	Plug	RCA x 3	Plug	1.5m	WQ-7245	230	Video	Best	F Plug	Plug	F Plug	Plug	3.0m	WV-7392	231
Video	Best	Scart	Plug	RCA x 3	Plug	5.0m	WQ-7241	230	Video	Best	F Plug	Plug	F Plug	Plug	5.0m	WV-7394	231
Video	Best	RCA x 3	Plug	RCA x 3	Plug	5.0m	WQ-7250	230	Video	Best	F Plug	Plug	F Plug	Plug	10.0m	WV-7396	231
Video	Best	RCA x 3	Plug	RCA x 3	Plug	10.0m	WQ-7252	230	Video	Good	BNC	Plug	BNC	Plug	1.5m	WV-7300	231
Video	Best	D15HD	Plug	D15HD	Plug	10.0m	WQ-7258	312	Video	Good	RCA	Plug	RCA	Plug	1.5m	WV-7304	231
Video	Best	D15HD	Plug	RCA x 3	Plug	1.5m	WQ-7259	230	Video	Good	RCA	Plug	RCA	Plug	3.0m	WV-7306	231
Video	Good	HDMI	Plug	HDMI	Plug	1.5m	WV-7915	235	Video	Good	BNC	Plug	RCA	Plug	1.5m	WV-7308	231
Video	Good	HDMI	Plug	HDMI	Plug	3.0m	WV-7916	235	Video	Good	RCA	Plug	Coaxial	Plug	1.5m	WV-7312	231
Video	Good	HDMI	Plug	HDMI	Plug	5.0m	WV-7917	235	Video	Good	S-Video	Plug	S-Video	Plug	1.5m	WV-7330	231
Video	Best	HDMI	Plug	HDMI	Plug	0.5m	WV-7914	235	Video	Good	S-Video	Plug	S-Video	Plug	3.0m	WV-7332	231
Video	Best	HDMI	Plug	HDMI	Plug	1.5m	WQ-7906	235	Video	Good	S-Video	Plug	S-Video	Plug	5.0m	WV-7334	231
Video	Best	HDMI	Plug	HDMI	Plug	5.0m	WQ-7902	235	Video	Good	S-Video	Plug	S-Video	Plug	10.0m	WV-7336	231
Video	Best	HDMI	Plug	HDMI	Plug	5.0m	WQ-7904	235	Video	Good	Coaxial	Plug	F Plug	Plug	1.5m	WV-7384	231
Video	Best	HDMI	Plug	HDMI	Plug	10.0m	WQ-7905	235	Video	Good	Coaxial	Plug	F Plug	Plug	3.0m	WV-7385	231
Video	Best	HDMI Swiv	el Plug	HDMI Swiv	el Plug	1.5m	WQ-7401	235	Video	Good	F Plug	Plug	F Plug	Plug	1.5m	WV-7386	231

VIDEO LEADS

3 X RCA PLUGS TO 3 X RCA PLUGS Low capacitance AV connecting cable



7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.5m	WV-7316		\$7.95	\$6.95
	3.0m	WV-7318	\$12.50	\$10.95	\$9.95
	5.0m	WV-7320	\$14.95	\$13.35	\$11.70
	10.0m	WV-7321	\$24.95	\$22.35	\$19.70

3.5mm 4 CONTACT PLUG TO 3 X RCA PLUGS



7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.5m	WV-7345	\$11.95	\$10.70	\$9.50

S-VIDEO 4 PIN MINI DIN PLUG TO S-VIDEO 4 PIN MINI DIN PLUG



7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.5m	WV-7330	\$9.95	\$8.75	\$7.75
	3.0m	WV-7332	\$12.95	\$11.35	\$10.35
	5.0m	WV-7334	\$14.95	\$13.35	\$11.70
	10.0m	WV-7336	\$24.95	\$22.35	\$19.70

SCART PLUG TO SCART PLUG Standard 21 pin SCART AV

Standard 21 pin SCART AV Cable (all 21 pins wired)



7 Length Cat. Qty 1+ Qty 4+ Qty 10+ 1.5m WV-7338 \$11.95 \$10.70 \$9.50

SCART PLUG TO 6 X RCA PLUGS6 core SCART AV connecting cable



7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.5m	WV-7342	\$11.95	\$10.70	\$9.50
	3.0m	WV-7344	\$19.95	\$17.70	\$15.70

3 RCA PIGGYBACK PLUGS TO 3 X RCA PLUGS

With these leads, you can connect 2 outputs from one set of RCA sockets. A lot cheaper than buying double adaptors.



4	7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
		1.5m	WV-7324	\$13.95	\$12.35	\$10.95
		3.0m	WV-7325	\$15.95	\$14.35	\$12.70
		5.0m	WV-7326	\$19.95	\$17.70	\$15.70

BNC PLUG TO BNC PLUG

RG-59U coaxial cable



7 Length Cat. Qty 1+ Qty 4+ Qty 10+ 1.5m WV-7300 \$9.50 \$8.50 \$7.50

RCA PLUG TO RCA PLUG

RG-59U coaxial cable



7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.5m	WV-7304	\$6.95	\$6.25	\$5.50
	3.0m	WV-7306	\$7.95	\$6.95	\$6.25

RCA PLUG TO BNC PLUG RG-59U coaxial cable



7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.5m	WV-7308	\$7.95	\$6.95	\$6.25

RCA PLUG TO TV COAXIAL PLUG RG-59U coaxial cable



7 Length Cat. Qty 1+ Qty 4+ Qty 10+ 1.5m WV-7312 \$5.95 \$5.25 \$4.75

F PLUG TO TV COAXIAL PLUG

RG-59U coaxial cable



7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.5m	WV-7384	\$4.95	\$4.45	\$3.90
	5.0m	WV-7385	\$9.95	\$8.75	\$7.75

F PLUG TO F PLUG

RG-59U coaxial cable



7 Length Cat. Qty 1+ Qty 4+ Qty 10+ 1.5m WV-7386 \$8.95 \$7.95 \$6.95

HIGH QUALITY F PLUG TO F PLUG RG-6 Quad screened, hex crimp coaxial cable



7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.5m	WV-7390	\$5.95	\$5.25	\$4.75
	3.0m	WV-7392	\$10.95	\$9.75	\$8.75
	5.0m	WV-7394	\$14.95	\$13.35	\$11.70
	10.0m	WV-7396	\$24.95	\$22.35	\$19.70

HIGH QUALITY AV LEADS

A premium range of audio video cables at the right price. These are high performance non-migration interconnection cables utilising 99.96% pure OFC.



- 24 carat hard gold plated contacts
- 100% shielded metal bodied plugs with positive finger grip & moulded cable strain relief.
- Video cable covered in soft & flexible matt or matte blue jacket
- · Recommended for digital or analogue signals
- For home theatre systems, Hi-Fi systems, video/camcorder/ TV/VCR/editing suites, DVD, satellite and any application which deserves the absolute best in AV performance
- Clean and clear image reproduction
- Attractively packaged
- Will stand up to the quality of units that sell up to 4-5 times more elsewhere (apart from the expensive packaging!)

Use	Quality	Con	nector t	o Connect	or	Length	Cat.	Page
AV	Best	RCA x 3	Plug	RCA x 3	Plug	1.5m	WQ-7234	230
AV	Best	RCA x 3	Plug	RCA x 3	Plug	10.0m	WQ-7235	230
AV	Best	RCA x 3	Plug	RCA x 3	Plug	3.0m	WQ-7236	230
AV	Best	RCA x 3	Plug	RCA x 3	Plug	5.0m	WQ-7237	230
AV	Best	Scart	Plug	RCA x 3	Plug	1.5m	WQ-7244	230
AV	Best	S-Vid	Plug	RCA	Plug	1.5m	WQ-7253	230
AV	Best	3.5 (4 pole)	Plug	RCA x 4	Plug	1.5m	WC-7694	224
AV	Best	Scart	Plug	Scart	Plug	1.5m	WQ-7248	230
AV	Best	Scart	Plug	Scart	Socket	1.5m	WQ-7249	230
AV	Best	Scart	Plug	RCA x 5	Plug	1.5m	WQ-7255	230
AV	Good	RCA x 3	Plug	RCA x 3	Plug	1.5m	WV-7316	231
AV	Good	RCA x 3	Plug	RCA x 3	Plug	3.0m	WV-7318	231
AV	Good	RCA x 3	Plug	RCA x 3	Plug	5.0m	WV-7320	231
AV	Good	RCA x 3	Plug	RCA x 3	Plug	10.0m	WV-7321	231
AV	Good	Scart	Plug	Scart	Plug	1.5m	WV-7338	231
AV	Good	Scart	Plug	RCA x 6	Plug	1.5m	WV-7342	231
AV	Good	Scart	Plug	RCA x 6	Plug	3.0m	WV-7344	231
AV	Good	3.5 (4 pole)	Plug	RCA x 3	Plug	1.5m	WV-7345	231
AV	Good	RCA x 3 P	iggyback	RCA x 3	Plug	1.5m	WV-7324	231
AV	Good	RCA x 3 P	iggyback	RCA x 3	Plug	3.0m	WV-7325	231
AV	Good	RCA x 3 P	iggyback	RCA x 3	Plug	5.0m	WV-7326	231





75 OHM TV COAXIAL PLUG TO 75 OHM TV COAXIAL PLUG RG59U coaxial cable



S-VIDEO PLUG TO RCA PLUG



Length Cat. Qty 1+ Qty 4+ Qty 10+ WQ-7206 \$17.95 \$15.95 \$14.35 WQ-7208 \$18.95 \$16.95 \$14.95

Length Cat. Length Cat. Qty 1+ 1.5m WQ-7200 \$14.95 \$13.35

Qty 4+ Qty 1+ WQ-7253 \$22.95 \$20.35

TO RCA PLUG



75 OHM TV COAXIAL
PLUG TO
75 OHM TV COAXIAL
SOCKET
RG59U coaxial cable.



AV parallel cable. Plugs colour coded.

SCART PLUG TO 3 X RCA PLUGS



Cat. Qty 1+ Qty 4+ Qty 10+ WQ-7244 \$34.95 \$31.45 \$27.90

Qty 1+ Qty 4+ Qty 10+ \$13.35 7 Length Cat.

Video coaxial cable RG594 75Ω.

7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	0.5m	WQ-7221	\$10.95	\$9.75	\$8.75
	1.5m	WQ-7222	\$11.95	\$10.70	\$9.50
	3.0m	WQ-7223	\$14.95	\$13.35	\$11.70
	5.0m	WQ-7224	\$17.95	\$15.95	\$14.35
	10.0m	WO-7225	\$23.95	\$21.35	\$18.95

Z Length Cat.

3 X RCA PLUGS

AV parallel cable

Coloured cable ID.

TO 3 X RCA PLUGS

Length Cat.

1.5m

3.0m

5.0m

coded plugs.

Freecall order hotline: 1800 022 888

1.5m WQ-7202 \$14.95

SCART PLUG TO COMPONENT VIDEO

Video cable Plugs colour coded

1.5m



オ Length Cat. Qty 1+ Qty 4+ WQ-7245 \$34.95 \$31.45 1.5m \$27.90 WQ-7241 \$59.95

TO 2 X RCA PLUGS Stereo parallel cable

2 X RCA PLUGS



7	Length		Qty 1+	Qty 4+	Qty 10+
	0.5m	WQ-7227	\$16.95	\$14.95	\$13.35
	1.5m	WQ-7226		\$16.95	\$14.95
	3.0m	WQ-7228		\$22.35	\$19.70
	5.0m	WQ-7230	\$29.95	\$26.90	\$23.70
	10.0m	WQ-7232	\$49.95	\$44.90	\$39.90

RGB COMPONENT VIDEO 3 X RCA PLUGS TO 3 X RCA PLUGS AV parallel cable. Colour



Qty 4+

\$31.45

\$40.45

\$44.90

Qty 10+

\$27.90

\$35.90

\$39.90

Qty 1+

WO-7234 \$34.95

WQ-7236 \$44.95

WQ-7237 \$49.95

10.0m WQ-7235 \$59.95

7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	0.5m	WQ-7239	\$29.95	\$26.90	\$23.70
	1.5m	WQ-7238	\$34.95	\$31.45	\$27.90
	3.0m	WQ-7240	\$44.95	\$40.45	\$35.90
	5.0m	WQ-7250	\$49.95	\$44.90	\$39.90
	10.0m	WQ-7252	\$59.95	\$53.95	\$47.90

SCART PLUG TO SCART PLUG



Qty 1+ Qty 4+ Qty 10+ 1.5m WQ-7248 \$34.95 \$31.45

FIND OUT MORE IN STORE

Our staff can offer friendly and expert advice, from product information to electronics solutions; we're here to help.

S-VIDEO 4 PIN MINI **DIN PLUG TO PLUG** S-Video cable



7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.5m	WQ-7214	\$18.95	\$16.95	\$14.95
	3.0m	WQ-7216	\$22.95	\$20.35	\$18.35
	5.0m	WQ-7217	\$27.95	\$24.95	\$22.35
	10.0m	WQ-7220	\$34.95	\$31.45	\$27.90

Use	Quality		Connector	to Connec	tor	Length	Cat.	Page
Audio	Best	Toslink	Plug	Toslink	Plug	1.0m	WQ-7260	233
Audio	Best	Toslink	Plug	Toslink	Plug	0.5m	WQ-7261	233
Audio	Best	Toslink	Plug	Toslink	Plug	2.0m	WQ-7262	233
Audio	Best	Toslink	Plug	Optical 3.5	Plug	1.0m	WQ-7264	233
Audio	Best	Toslink	Plug	Toslink	Plug	5.0m	WQ-7263	233
Video	Best	DVI-D	Plug	DVI-D	Plug	2.0m	WC-7590	311
Video	Best	DVI-D	Plug	DVI-D	Plug	5.0m	WC-7591	311
Video	Best	DVI-A	Plug	D15HD	Plug	2.0m	WC-7594	311
Video	Good	Coaxial	Plug	Coaxial	Plug	1.5m	WV-7350	231
Video	Good	Coaxial	Plug	Coaxial	Plug	3.0m	WV-7351	231
Video	Good	Coaxial	Plug	Coaxial	Plug	5.0m	WV-7352	231
Video	Good	Coaxial	Plug	Coaxial	Plug	10.0m	WV-7354	231
Video	Good	Coaxial	Plug	Coaxial	Socket	1.5m	WV-7360	231
Video	Good	Coaxial	Plug	Coaxial	Socket	3.0m	WV-7361	231
Video	Good	Coaxial	Plug	Coaxial	Socket	5.0m	WV-7362	231
Video	Good	Coaxial	Plug	Coaxial	Socket	1.5m	WV-7367	231
Gaming	Good	Plug	PS3	DIN + RCA	x 3 Plug	1.8m	WV-7434	231
Gaming	Good	Plug	Wii	DIN + RCA	x 3 Plug	1.8m	WV-7436	231
						A		

HIGH QUALITY AV LEADS (CONTINUED)

AV LEAD SCART-SCART plug to SCART socket, 1.5m length.



Length Cat. Qty 1+ 1.5m WQ-7249 \$9.95

SCART PLUG TO 3 X RCA PLUGS RGB + 2 X RCA PLUGS

TONCOR D



Zength Cat. Qty 4+ Qty 10+ Otv 1+ WQ-7255 \$49.95 \$44.90 1.5m \$39.90 3.0m WQ-7251 \$59.95 \$47.90

VGA TO 3 X RGB PLUGS RGB

- D15HD male to 3 x RCA plug
- Superior electrical screening



7 Length Cat. Qty 10+ Qty 1+ 1.5m WQ-7259 \$32.95 \$29.45

SCART ADAPTOR

- · Female to female
- Enables shorter SCART leads to be extended



Cat. Qty 1+ Qty 4+ Qty 10+ PA-3650 \$5.95 \$5.25

DVI CABLES

DVI-D TO DVI-D VIDEO CABLES · DVI to DVI

- video cables Male to Male
- 24 pin



7 Length Cat. Otv 10+ Otv 4+ WC-7590 \$29.95 2.0m \$26.90 \$23.70 WC-7591 \$44.95 \$40.45 \$35.90

DVI-A TO VGA VIDEO CARLE

DVI to 15pin HD VGA



Length Cat. Qty 1+ Qty 4+ Qty 10+ 2.0m WC-7594 \$24.95 \$22.35 \$19.70

DVI & HDMI CABLES/ADAPTORS

DVI ADAPTOR

- Female to female
- Compatible with DVI-I single dual link, DVI-single/dual link & DVI-A male
- All pins wired straight through

Qty 1+ Qty 4+ Qty 10+ Cat. PA-0896 \$23.95 \$21.35 \$18.95

EXTENSION LEAD - FME

FME Row Loss Extension Lead

• Length 5m





TV FLYLEADS

75 OHM COAX CABLE MALE TO FEMALE

75 ohm coax cable, male to female. No extension!



↗ Length Cat. Qty 1+ Qty 4+ Qty 10+ 1.5m WV-7367 \$3.50 \$3.15 \$2.75

TV COAXIAL PLUG TO TV COAXIAI PILIG

RG-59U coaxial cable. Double shielded cable.



オ Length Cat. Qty 10+ Qty 1+ Qty 4+ WV-7350 \$5.95 1.5m \$5.25 \$4.75 3.0m WV-7351 \$7.95 \$6.25 \$6.95 5.0m WV-7352 \$9.95 \$8.75 \$7.75 10.0m WV-7354 \$16.95 \$14.95 \$13.35

TV COAXIAL **PLUG TO SOCKET**

RG-59U coaxial cable Double shielded cable



7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.5m	WV-7360	\$4.95	\$4.45	\$3.90
	3.0m	WV-7361	\$7.50	\$6.75	\$5.95
	5.0m	WV-7362	\$8.90	\$7.95	\$6.95

SMA LEADS

SMA COAXIAL LEADS -FACTORY PRECRIMPED

- SMA plug to plug
- Gold plated connectors RG316 high quality
- coax cable Bandwidth up to 2.9GHz



7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+	
	1.0m	WC-7800	\$17.95	\$15.95	\$14.35	
	3.0m	WC-7802	\$29.95	\$26.90	\$23.70	
	5.0m	WC-7804	\$39.95	\$35.90	\$31.90	

GAME LEADS

PS3®/PS2® S-VIDEO **UPGRADE CABLE**

•1.8m



Cat. Otv 1+ WV-7434

NINTENDO® WII CONNECTOR TO S-VIDEO PLUS STANDARD **COMPOSITE VIDEO &** STEREO AUDIO

•1.2m



7 Cat. WV-7436

FIBRE OPTIC LEADS

TOSLINK PLUG TO TOSLINK PLUG

These products suit some CD players and home cinemas, especially for Dolby Digital 5.1 (AC-3).



\$9.95

7	Length		Qty 1+	Qty 4+	Qty 10+
	0.5m	WQ-7261		\$14.95	\$13.35
	1.0m	WQ-7260	\$19.95	\$17.70	\$15.70
	2.0m	WQ-7262	\$29.95	\$26.90	\$23.70
	5.0m	WQ-7263	\$54.95	\$49.45	\$43.90

TOSLINK PLUG TO 3.5mm PLUG

Connect mini disc players or other equipment with 3.5mm optical to an AV receiver with Toslink.



Length Cat. Qty 1+ Qty 4+ Qty 10+ 1.0m WQ-7264 \$24.95 \$22.35 \$19.70 Z Length Cat.

OPTICAL ADAPTORS

TOSLINK ADAPTOR **FEMALE / FEMALE**

 Enables shorter optical leads to be extended

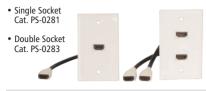


7 Cat. Qty 4+ Qty 10+ Qty 1+ PA-3575 \$6.95 \$5.50

TOSLINK FEMALE TO OPTICAL 3.5mm MALE



Cat. Qty 4+ Qty 10+ PA-3574

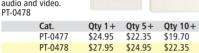


(Cat.	Qty 1+	Qty 5+	Qty 10+
F	PS-0281	\$14.95	\$13.35	\$11.70
F	PS-0283	\$24.95	\$22.35	\$19.70

VGA Wallplates

Standard wallnlate with VGA and 3.5mm audio socket. PT-0477





Keystone Wallplates - White

Flush type wall plates to accept our standard keystone 110 jacks. Fits standard Australian electrical switch plate installation hardware and screw centres, making it perfect for easy flush installation on plasterboard or other cavity walls.

Supplied unloaded without keystone jacks Dimensions: 70(W) x 114(H) x 6(D)mm



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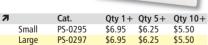
	Cat.	Qty 1+	Qty 5+	Qty 10+
Single	YN-8050	\$2.50	\$2.21	\$1.95
Double	YN-8052	\$2.50	\$2.21	\$1.95
Triple	YN-8054	\$2.75	\$2.45	\$2.15
Quad	YN-8056	\$2.90	\$2.60	\$2.30
6 Way	YN-8058	\$2.90	\$2.60	\$2.30

Recessed Cable Entry Wallplate - Small

Create a neat cable entry/exit point for terminated or nonterminated audio and video leads. The wallplate design allows cables to be passed through walls with minimal fuss and the inner curved recessed design ensures maximum safety.

· Mounting screws included

- Screw thread size: 2.5mm Small - Dimensions
- 124(W) x 82(H) x 36(D)mm - PS-0295
- Large Dimensions 124(W) x 82(H) x 55(D)mm - PS-0297



Brush Cable Entry Wallplate

Single gang brush plate for cable entry through walls etc. Suitable for pre terminated cables going to LCD or plasma screens, and particularly suited to HDMI cables as they can't be split, spliced or field-terminated. An ideal solution if you only have a short cable run.



Freecall order hotline: 1800 022 888

Cat.	Qty 1+	Qty 5+	Qty 10+
PS-0291	\$9.95	\$8.75	\$7.75

Inserts for Keystone Wallplates

A range of inserts to cater for computer and Audio video applications. They fit standard 110 keystone wallplates and allow you to configure your installation any way you like.





7	Insert Type	Cat.	Qty 1+	Qty 5+	Qty 10+
	F81 - F81 - White	PS-0761	\$2.95	\$2.60	\$2.30
	BNC - BNC - White	PS-0763	\$2.95	\$2.60	\$2.30
	RCA - RCA Socket - White	PS-0764	\$2.95	\$2.60	\$2.30
	RCA - RCA - Red	PS-0765	\$2.95	\$2.60	\$2.30
	RCA - RCA - Yellow	PS-0767	\$2.95	\$2.60	\$2.30
	S-Video - S-Video	PS-0769	\$3.95	\$3.45	\$3.15
	3.5mm Socket	PS-0777	\$2.95	\$2.60	\$2.30
	4mm Banana - Banana - Red	PS-0774	\$2.95	\$2.60	\$2.30
	4mm Banana - Banana - Black	PS-0775	\$2.95	\$2.60	\$2.30
	HDMI - HDMI - White	PS-0771	\$12.95	\$11.35	\$10.35
	USB - USB - White	PS-0773	\$6.95	\$6.25	\$5.50
	USB B - USB A Socket	PS-0753	\$6.95	\$6.25	\$5.50
	USB 3.0 - USB 3.0 - White	PS-0779	\$0.30	\$0.25	\$0.24
	Toslink - Toslink	PS-0749	\$3.95	\$3.45	\$3.15
NEW	RJ11 Socket - 6P4C	YN-8026	\$4.95	\$4.45	\$3.90
NEW	RJ12 Socket - 6P6C	YN-8027	\$4.95	\$4.45	\$3.90
NEW	RJ45 Socket - Cat5e	YN-8028	\$4.95	\$4.45	\$3.90
NEW	RJ45 Socket - Cat6	YN-8029	\$4.95	\$4.45	\$3.90

WALLPLATES STAINLESS STEEL

No matter what audio installation you're contemplating, you're sure to find a wall plate to give your room that pro look. Finished in attractive stainless steel, these cost-effective wall plates have all the popular audio connectors, or use a blank to customise your own. Ideal for Hi-Fi installations, home studios, home theatre or just a neat solution to running an AV extension to another room.

Blank Wallplate

Stainless steel blank wallplate



7	Cat.	Qty 1+	Qty 2+	Qty 5+
Blank	PS-0550	\$3.95	\$3.45	\$3.15

XLR - Blank & Loaded

Pre-punched blanks for XLR sockets Sockets not included

Single: PS-0551 Double: PS-0552





7	Cat.	Qty 1+	Qty 2+	Qty 5+
Single Blank	PS-0551	\$4.50	\$3.95	\$3.60
Double Blank	PS-0552	\$4.95	\$4.45	\$3.90

XLR Sockets

Pre-punched wallplate with loaded XLR socket(s)

Single 3P female XLR socket Cat. PS-0553

Double 3P Female XLR socket Cat. PS-0554 Single 3P Male XLR

socket Cat. PS-0555 Double 3P Male XI R socket Cat. PS-0556

Cat.

Single XLR PS-0553 \$6.95

Single XLR PS-0555 \$6.95

Double XLR PS-0554 \$9.95

Double XLR PS-0556 \$9.95



Otv 2+

\$6.25

\$6.25

\$8.75

\$8.75





Otv 5+

\$5.50

\$5.50

\$7.75

\$7.75

Double PS-0560 \$9.95 **Rubber Cover for XLR Socket** Rubber Cover for Male

PS-0559 \$6.95

6.5mm Socket - Locking

Stainless steel wallplates with single or

double 6.5mm (1/4") locking socket(s).

Single 1/4" PS-0557 \$6.95

Double 1/4" PS-0558 \$9.95

Single 4 pole Speakon socket

Double 4 pole Speakon socket

Cat. PS-0559

Cat. PS-0560

Single

4 Pole Speakon Socket

XLR Socket Cat. PS-0561

Rubber Cover for Female XLR Socket Cat. PS-0562



\$6.25

Otv 5+

\$5.50

Qty 5+

\$5.50

\$7.75

\$6.25

\$8.75

y 1+	Qty 10+	Qty 50+	
Ι Γ Λ	¢0.4E	40.40	

7	Cat.	Qty 1+	Qty 10+	Qty 50+
Suit Male	PS-0561	\$0.50	\$0.45	\$0.40
Suit Female	PS-0562	\$1.00	\$0.90	\$0.80

Otv 1+

TELL

WC-7744

HOME THEATRE

Like we said on page 217 about flat screen TV's we do not sell large home theatre AV amps, or multiple speaker combo's etc. What we do best is the interfacing of major home theatre

What's really emerging as a big gorilla in this technology is HDMI. Absolutely EVERYTHING it seems is going through a HDMI product. The HDMI technology has proven to be so versatile it is absolutely essential to use HDMI interfacing especially for High Definition and 3D.

Jaycar has become No.1 in Australia with range and expertise in this expanding technology. No wonder the major retailers simply refer people to us (once they have sold a flat screen or a projector, of course!)

So take some time to check out some of the fantastic things you can do to your home cinema installation via HDMI!

HDMI STANDARD

with ethernet

Oh! And while you are at it have a look at the fabulous other new AV products for 2012



HDMI LEADS

BARGAIN HDMI LEAD - 1.5M

At this price, you don't have any excuse not to take advantage of HDMI in your AV system. 1.5m, HDMI Standard with Ethernet. What a bargain! Made from 99.99% pure copper, with triple layer shielding & nickel plated connectors. Supports 1080p



7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.5m	\/\/_791 <i>/</i> I	\$9.95	\$8.75	\$7.75

ECONOMY HDMI 1.4 LEADS

HDMI leads needn't cost an arm and a leg. If your budget doesn't extend too far, these leads are a cost-effective solution without compromising

quality or performance. All have gold plated connectors and have HDMI 1.4 Standard with Ethernet classification.

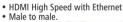
HDMI STANDARD with ethernet



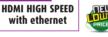
7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.5m	WV-7915	\$19.95	\$17.70	\$15.70
	3.0m	WV-7916	\$24.95	\$22.35	\$19.70
	5.0m	WV-7917	\$39.95	\$35.90	\$31.90

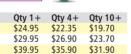
CONCORD HIGH QUALITY HDMI 1.4 CABLES

These are our premium HDMI 1.4 High Speed with Ethernet cables. They feature heavily plated 24K gold plated connectors and oxygen-free heavy copper cabling. Each plug is solidly constructed for frequent, reliable use Also featured are high quality moulded strain-relief cord grommets and a braided sheath to protect against wear. They don't have magical properties, but what you put in one end will come out the other...and that's all you need them to do.









HDMI HIGH SPEED

7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	0.5m	WQ-7906	\$24.95	\$22.35	\$19.70
	1.5m	WQ-7900	\$29.95	\$26.90	\$23.70
	3.0m	WQ-7902	\$39.95	\$35.90	\$31.90
	5.0m	WQ-7904	\$49.95	\$44.90	\$39.90
	10m	WQ-7905	\$79.95	\$71.95	\$63.95

HDMI LEADS WITH EXTENDER

Extending your high definition AV signals need not be an expensive exercise. Normally HDMI cables must be kept to a maximum of 5 metres to avoid signal degradation. Longer runs require the use of external amplifiers. These affordable HDMI cables have a built-in equaliser at the monitor end to boost the signal strength to enable cable lengths of 10m or more. external power supply is needed as they draw power from the HDMI port itself.

Cables are ATC certified and supports 120Hz

Note: Must be installed so the equaliser is at the monitor end of the cable run.

7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	10m with extender	WQ-7403	\$99.00	\$88.95	\$78.95
	15m with extender	WQ-7408	\$139.00	\$124.95	\$110.95
	20m with extender	WQ-7409	\$199.00	\$178.95	\$158.95

HDMI LEAD WITH ROTATING PLUGS 1.5M

HDMI cable with a difference - the plug on each end of the cable rotates through 180° to accommodate whatever installation challenge you have.

1.5m length

• HDMI 1.3 compliant



CONCOR!

HDMI HIGH SPEED

TECH TIP

7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.5m	WQ-7401	\$14.95	\$13.35	\$11.70

AV LEAD HDMI PLUG TO TYPE C HDMI PLUG Type A plug to Type C or 'Mini' HDMI plugcable for connection to portable HDMI devices.

- Gold plated shield
- 24K gold contacts
 Internal dual strain relief
- Triple shielded
- Nitrogen gas injected dielectric

•	конз	& HUIVII	۷۱.3	compliant	
-	l la	nath			

7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	3.0m	WQ-7412	\$34.95	\$31.45	\$27.90

HDMI RETRACTABLE LEADS

HDMI RETRACTABLE LEADS

These HDMI cables retract for taking on-the-go or when put in storage.

- · ATC certified
- Ultra fast signal Ethernet channel
- Pure digital connectionAdvanced technology connection
- 1.3m length





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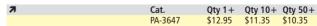
7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	HDMI Plug to HDMI Plug	WC-7740	\$24.95	\$22.35	\$19.70
	HDMI Plug to HDMI C Plug	WC-7742	\$24.95	\$22.35	\$19.70
	HDMI Plug to HDMI D Plug	WC-7744	\$24.95	\$22.35	\$19.70

HDMI ADAPTORS

HDMI Plug to HDMI Socket Swivel Adaptor

Connect HDMI cables where space is an issue such as wall mounted TV's with this adaptor which swivels up to 180°.

· Gold plated connectors

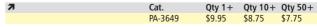


Micro HDMI Plug to HDMI Socket Adaptor

with micro HDMI socket to any TV with a HDMI connection.

· Colour: Black

Gold plated connectors







HDMI Adaptors, Switchers & Splitters

HDMI ADAPTORS (CONTINUED)

HDMI SOCKET TO SOCKET

HDMI Socket to Socket Gender IC Adaptor



HDMI PLUG TO DVI-D HDMI plug to DVI-D socket adaptor



HDMI SOCKET TO DVI-D PLUG ADAPTOR

Connect a computer DVI-D output directly to a TV or projector with this simple converter. Plug the converter into the DVI-D port on a computer and connect a HDMI cable to the TV or projector. Can also function in reverse to connect HDMI cables to a display with a HDCP compatible DVI-D port. HDMI cable not included.



MINI HDMI PLUG TO HDMI **SOCKET ADAPTOR**

Ideal for camcorders or other devices utilising the mini HDMI standard socket.



	Cat.	Qty 1+	Qty 10+	Qty 50+
HDMI SOCKET TO SKT	PA-3640	\$16.95	\$14.95	\$13.35
HDMI PLUG TO DVI-D	PA-3642	\$16.95	\$14.95	\$13.35
HDMI SKT TO DVI-D	PA-3644	\$16.95	\$14.95	\$13.35
MINI HDMI PLUG TO SKT	PA-3645	\$9.95	\$8.75	\$7.75

HDMI CONVERTER LEADS

HDMI 1.4 TO MICRO D PLUG LEAD 2M

HDMI to Micro D plug with 2m lead.







DISPLAY PORT PLUG TO HDMI SOCKET



MINI DVI PLUG TO **HDMI SOCKET**

ALL HDMI HIGH SPEED with ethernet



7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	0.15m	WQ-7422	\$29.95	\$26.90	\$23.70
	0.30m	WQ-7423	\$24.95	\$22.35	\$19.70
	2.0m	WQ-7911	\$34.95	\$31.45	\$27.90

HDMI to DVI-D connector



7 Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WQ-7407	\$24.95	\$22.35	\$19.70
3.0m	WQ-7406	\$34.95	\$31.45	\$27.90
1.5m	WQ-7407	\$24.95	\$22.35	\$19.70

HDMI SWITCHES, SPLITTERS, CONVERTERS

2 Input HDMI Switcher

The tiny switcher routes high definition video (in multiple resolutions up to 1080p) and digital audio from two HDMI sources to a display screen. This allows the simultaneous connection of video sources such as satellite receivers or HD DVD players to a single HDMI port on

your display. Powered from the HDMI source it automatically switches to either port when a signal is present and defaults to port 1 if both are on. A manual override push button on the side allows you to bypass this if necessary.

• Dimensions: 80(L) x 43(W) x 15(H)mm



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1691	\$39.95	\$35.90	\$31.90

3 Port High Definition Switch



A unique high definition switcher that allows integration of older analogue devices to modern digital home theatre systems. This system expander will allow you to hook up, convert and switch between a component video (YPbPr), DVI-Digital, and an HDMI signal to one HDMI v1.3 output. Audio is also combined with the video signal, so you can combine stereo audio or optical digital audio with your YPbPr video source, and DVI-D can be combined with optical digital audio. Includes an IR remote control for ease of use, as well as the mains adaptor.



- Switch easily between 3 sources: YPbPr, DVI-D and HDMI
- Combines audio with video: YPbPr + stereo/S/PDIF, DVI + S/PDIF Output: 1x HDMI v1.3 compliant output + optical S/PDIF digital audio
- Extends the range of an HDMI compliant device
- HD resolution up to 1080p, VGA up to 1920 x 1200
 Discrete IR remote / HDCP pass-through
- Power supply: 5VDC 2A
- Dimensions: 258(W) x 120(D) x 28(H)mm

7	Cat.	Qty 1+
	AC-1684	\$69.00



LRAZ9

WHAT'S NEW WITH HDMI 1.4

With a whole host of new technologies being introduced into living rooms, the people behind HDMI made sure that they kept ahead of technology by introducing the new HDMI 1.4 specifications. There are a few key features that have been introduced with HDMI 1.4, along with a completely new naming convention. The idea behind the move is to create one global standard for HDMI to cover all applications and to incorporate all features into one cable.

Some of the new features for HDMI 1.4 are:

- HDMI Ethernet channel: adds a high speed networking link on the HDMI cable, allowing users to take advantage of their IP-enabled devices, such as Internet active TVs.
- Audio return channel: Allows an HDMI-connected TV with built-in tuner to send audio data "upstream" back to your amplifier/sound system, eliminating the need for a separate audio cable

Freecall order hotline: 1800 022 888

- 3D compatibility: defines input/output protocols for major 3D video formats, paving the way for true 3D gaming/home cinema applications
- 4K support: enables video resolutions FAR beyond 1080p, providing support for the next generation of displays

As well as these new features, HDMI 1.4 also defines a new naming convention for all HDMI cables:



- HDMI Standard
- HDMI Standard Automotive
- HDMI High Speed with Ethernet
- HDMI Standard with Ethernet
- HDMI High Speed

Standard and High Speed refer to two grades of HDMI cable, tested to different performance metrics. A Standard cable can transmit a 1080i signal for 15 metres or more, while a High Speed HDMI cable can transmit a 1080p signal for at least 7.5 metres. We have also made sure to keep pace with fast moving technology, and we have updated our entire Concord and Digitech range of HDMI cables to comply with HDMI 1.4 and have also included the HDMI Ethernet channel...

For those who don't yet know what HDMI is, please refer to our website "primers" section for a fantastic technical explanation of the now almost universally adopted HDMI standard.

HDMI Switchers & Splitters

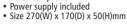
HDMI SWITCHES, SPLITTERS, CONVERTERS (CONTINUED)

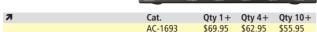
5 Input HDMI Switcher

This stylish design five input HDMI selector routes high definition video and audio signals from the selected input to the HDMI output. It's fully HDCP compliant and comes with an

infrared remote control to select the HDMI

- 5 x HDMI inputs
 Fully HDMI and
 HDCP compliant
 Sourcer supply inc

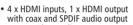




4 Input HDMI Switcher with Digital Audio Splitter

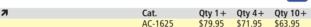
Get the highest picture and sound quality out of your HDMI signal while keeping your older surround sound system. HDMI conveniently integrates both audio and video signals however some HD televisions don't allow connection of sound systems without HDMI. This HDMI switcher will select

between 4 inputs using the included IR remote control then separate the digital audio signal from the HDMI interface before the TV. Digital audio can then be sent to your amplifier by optical or coaxial audio cable.



- HDMI 1.3b compliant HDTV 1080p resolution
- Amplifier bandwidth 2.25Gbps/225MHz
- Dimensions: 155(W) x 70(D) x 23(H)mm





4 Input HDMI Switcher with Audio **Return and Ethernet**

This versatile HDMI switcher allows you to expand your HDTV system and connect multiple devices such as game consoles or DVD players to a single HDMI input. With inbuilt HDCP control to minimize switching delay you can rapidly change between the four input signals using the remote control.

Separate audio outputs allow you to connect a surround sound amplifier without HDMI while an Audio Return Channel (ARC) decoder enables digital audio output when the television is displaying an internal DVB-T or PVR signal. To complete the unit there is also a HDMI Ethernet connection allowing you to share the network from the HDMI signal to a Media Centre or PVR without the use of an Ethernet switch.

- HDMI 1.4a Compliant
 Supports 3D, HEAC, and CEC
 4 x HDMI Inputs
- 1 x HDMI Output
- Ethernet Port
- Digital Audio Output: Optical or Coaxial
- Analogue Audio Output:
 3.5mm Stereo
- Dimensions: 154(W) > 70(D) x 25(H)mm



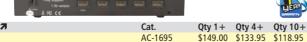
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1619	\$99.00	\$88.95	\$78.95

4 Output HDMI Signal Splitter

A splitter allows one HDMI output device to be distributed to up to four monitors or projectors without any loss of signal. Ideal for conferences, conventions, presentations or very large home theatre installations.

- Simultaneous display
- Supports 480p, 720p, 1080i, 1080p





4 Input HDMI Matrix Switcher with 2 Outputs

Share four HDMI sources between two high definition TVs (HDTV). Essentially, you are able to use all of your high definition sources like Blu-ray, PS3, HD set top boxes etc in your main living room entertainment centre in another HD display in a separate location or room, thus saving you thousands from purchasing HD players all over again! It also reduces cable clutter as well as the hassles of disconnecting and reconnecting sources to a TV with only one or two HDMI inputs. Switch easily between any four HDMI sources with the IR remote included, with up to 16 combinations.



- Mains plugpack included.Supports HDMI 1.3b
- Supports HDTV 1080p
- Video amplifier bandwidth 2.25Gbps/225MHz

7	Cat.	Qty 1+	Qty 4+	Qty 10+
				\$118.95

2 Output HDMI Signal Splitter

Play your Blu-ray or HD movies to more than one HDTV. Use this HDMI amplifier splitter to convert a single HDMI input signal into two identical and simultaneous output signals, all without losing high definition video and

- audio quality. Supports HDMI 1.3b
- Up to 2.25Gbps/225MH
 Dimensions: 155(L) x 70(W) x 23(H)mm







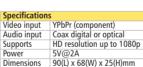




Active Component Video to HDMI Converter

Most plasma/LCD TVs these days have many more HDMI inputs than component video inputs, so this converter is perfect for when you have run out of component video inputs, but have plenty of HDMI inputs to spare. The converter will take the component video (YPbPr) and digital audio output from your DVD player, set-top box or Digital Pay TV box - and convert them to a HDMI signal. No need to upgrade everything else just yet!

Mains adaptor included





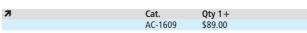
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1607	\$99.00	\$88.95	\$78.95

Active VGA + Audio to HDMI Converter

If you've just invested in a large home theatre n you've just invested in a large nome treate setup, you might now be thinking how you can hook up your PC to watch your large collection of media files on "the big screen". This converter box is the answer! It takes the VGA output + stere audio signal from your PC, and converts them to now common

HDMI format whilst maintaining full high-definition (HD) resolution. Mains adaptor included.

- Supports HD resolution up to 1080p
- Supports VGA resolution up to 1920x1200 HDMI v1.3 compliant
- Power: 5V@2A
- Dimensions: 90(L) x 68(W) x 25(H)mm







HDMI SWITCHES, SPLITTERS, CONVERTERS (CONTINUED)

S-Video / Composite AV to HDMI Converter

Convert your analogue signals and enjoy the complete digital video and digital audio experience. Converts analogue CVBS, S-Video and audio (L/R) signal to HDMI signal. It not only meets HDTV picture quality, but it also meets the high standards of digital audio. It improves the interlaced video signal into a 720p progressive signal.

Video output: NTSC 3.58 / PAL (auto)HDMI output: 720p@50/60Hz



Cat

AC-1624

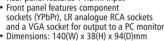
\$119.00

\$106.95

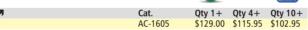
HDMI to VGA/Component & Analogue Audio Converter

No need to upgrade to expensive LCDs or plasmas just yet. This converter will allow you to convert HDMI signals from DVD, Blu-ray or set top boxes to VGA and component video with audio left and right for connection to your older TVs or PC monitors. Supports resolution up to 1080P output resolution is determined by input Full HDCP compliant.









HDMI to Composite AV Converter

With many devices now including more HDMI outputs and less analogue outputs you With many devices now including more HDMI outputs and less analogue outputs yc can have problems installing your new equipment into existing systems. This HDMI to composite AV converter will give a standard Y/R/W RCA connection from any HDMI signal. Ideal for feeding a set top box or media device into an existing AV distribution system for clubs or business, it is also useful for situations where you have existing AV cables and no need to upgrade to a full HDMI signal path. Power supply included.

 HDMI input format: 480p / 576p / 720p / 1080i / 1080p AV output format: PAL 576i or NTSC 480i selectable

Input: HDMI Type A femaleOutput: RCA Yellow/Red/White

Power: 5VDC 1A

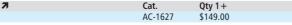


Composite/S-Video to HDMI Upscaler

Upscale composite or s-video signals to HDMI Allows you to output to a wide range of resolutions from 480p to 1080p. The unit will accept input from a composite video source, s-video source, 3.5mm audio source and output it to HDMI. LEDs on the front panel indicate what video source is being used and what resolution is being ouput.



- · Motion adaptive 3D Y/C separation comb filter
- Scales up composite video or S-Video to HDTV 1080p format
- Dimensions: 100(W) x 157(D) x 25(H)mm



Freecall order hotline: 1800 022 888

Component & Digital/Analogue Audio to HDMI Upscaler

This converter is designed to take a component video source and digital audio source (from a Toslink cable or .5mm socket) and scale it up for HDMI output at resolutions up to 1080p. The user menu features a comprehensive list of options to adjust for best picture and audio quality.





- HDMI 1.2, HDCP 1.1 and DVI 1.0 compliant.
 Scales any HD resolutions to PC (VGA WUXGA)/ HD (480i 1080p)
- Provides output picture adjustment on contrast, brightness, hue, saturation,
- sharpness, RGB (color tone) level and aspect ratio size Front panel features component video input, digital audio
- (Toslink) and analogue audio (3.5mm socket) inputs Rear panel features HDMI output, Toslink output for digital audio or 3.5mm for analogue audio.

 Resolution Output:
 PC: VGA, SVGA, XGA, SXGA, UXGA, WXGA, WSXGA, WUXGA.
 SD/HD: 480i, 576i, 480p, 576p, 720p, 1080i and 1080p • Dimensions: 154(D) x 100(W) x 25(H)mm

AC-1628

VGA & R/L Audio to HDMI Scaler Converter

Combines the audio and upscale the VGA output signal on a computer to 1280 x 720p for optimum viewing on a HDTV. Ideal for computers that only have a VGA output.

HDMI resolution fixed to 1280x720p
HDMI 165MHz/1.65Gbps per ch (6.75Gbps total)
HDMI 8 bit per channel

Signal inputs/outputs:

• Input signal: VGA, R/L audio Output video signal: HDMI 720p

VGA resolutions:

640 x 480 at 60/72/75/85Hz 800 x 600 at 60/72/75/85Hz 1024 x 768 at 60/70/75/85Hz

1280 x 720 at 60Hz 1280 x 768 at 60/70/75/85Hz

1280 x 800 at 60/70/75Hz 1280 x 960 at 60Hz, 1280 x 1024 at 60Hz

1440 x 900 at 60/75/85Hz, 1920 x 1080 at 60Hz

1920 x 1200 at 60Hz, 1920 x 1440 at 60Hz Note: It is possible that several resolutions are limited on few displays

Operating frequency:

- Vertical frequency range: 50/60Hz
 Video amplifier bandwidth: 1.65Gbps/165MHz

Weight: 0.68kgs

Dimensions: 88(L) x 68(W) x 25.5(H)mm

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1617	\$99.00	\$88.95	\$78.95

Mobile High-Definition Link (MHL) to HDMI Converter

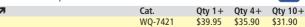
Connect your MHL enabled Smartphone to a HDMI display such as a large flat screen TV or computer monitor. It also has a remote control function so you can use your HDTV remote to control your mobile device through the HDMI CEC function. In essence it allows you to enjoy all the functions of your phone on the big screen. Games, movies, video calls, and any anything else you can think of. Connect the micro USB lead to your phone and a micro USB lead to the device to power, then connect a male-male HDMI cable to the device and to the display. Please ensure your phone supports MHL.

- Supports HDMI resolution:720p/60Hz,1080i/60Hz,1080p/24Hz/30Hz/60Hz
 Dimensions: 53(L) x 28(W) x 11(H)mm
 Lead length: 90(L)mm

Compatible with:

- ompatible with HTC Rezound phone Samsung Galaxy Note phone Samsung Galaxy S II phone Samsung Infuse 4G phone
- Galaxy Nexus phone
- HTC Evo 3D phone
 HTC Flyer tablet
- HTC Sensation phone
- HTC Sensation XE phone

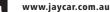
HTC Amaze 4G phone











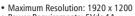
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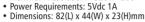
HDMI Converters & Extenders

HDMI CONVERTER & EXTENDERS

HDMI to DisplayPort® Converter

This converter enables display of HDMI signals on monitors or projectors which use the newer DisplayPort® connection standard. Ideal for monitors which don't have a HDMI input or to turn an unused DisplayPort® input into an additional HDMI input. Supplied with both a HDMI and DisplayPort® lead, as well as the required power supply.









\$88.95

\$78.95

\$99.00

MCH NE LEVELER

HDMI Audio Signal Volume Leveller

Great audio means you need the best, and with advanced HDMI repeating and decoding the HDMI Volume Leveller is the perfect choice to fine-tune your listening experience. Also helps protect your valuable home theatre equipment from annoying and equipment-damaging noise spikes. It will even sort out those annoying fluctuations in volume while channel surfing or between the TV shows

themselves and the advertisements (viseem to be louder).	which always	107	-
Regulates TV, satellite, radio and D' Mains power supply included HDMI in/out ports Boosts low and high-frequency content dynamically Dimensions: 100(W) x 64(D) x 23(H	CRAZE CLEARANCE PRICE	SRS TruVoli OFF HD ON	MI OUT
71	Cat.	Qty 1+	

AC-1621

7	Cat.	Qty 1+
	AC-1615	\$129.00

CAT 5/6 HDMI Extender

Most HDMI over Cat 5/6 extenders available use two cables for data and signal transmission. This extender only utilises one Cat 5/6 cable reducing the cable costs further on transmission over great distances. Both unshielded twisted pair (UTP) and shielded twisted pair (STP) cables may be used, however shielded is recommended.



7	Cat.	Qty 1+	Qty 4+	Qty 10+
Size (sender & receiver)	100(W) x 66(D) x 26(H)mm			WARRANTV
Max power consumption	15W			100
Power Requirement	5VDC at sender and receive	r		
Receiver to screen	2m			
Source to sender	2m			1
Supported HDMI cable length				1
	CAT6 UTP 24AWG 1080p/4			1
Transmission Range	Cat5 UTP 24AWG 1080p/35	m, 1080i/4	-0m	1
Bandwidth	1.65Gbps			1
Supported resolution	480p, 720p, 1080i, 1080p			7
Specifications				

Wall Plate HDMI & IR Repeater CAT5e Extender

A neat and simple wall plate HDMI extender kit. This kit extends your high definition AV source from your DVD Players, PS3, XBOX etc. up to a maximum 100m via Cat5 cables through the wall cavities. Supports full 1080p high definition of up to 30m. Integrates an infra-red extender for full control from the receiving end. RJ45 connections on the rear of each unit makes for easy connection

AC-1681

- CAT5 / 5e / 6 cable compliant
- HDMI 1.3 compliant
 Transmission range of up to 100m
- Supports up to true HDMI (1080p)
 Transmission Range: 100m (480i, 576i, 480p, 576p) / 70m (720p, 1080i) / 30m
- (1080p) Mains power supply included
- Wall plates measure: 115(H) x 70(W) x 32(D)mm



\$149.00 \$133.95

\$118.95

HDMI Over Cat5 Extender

An HDMI 1.3 over Cat 5 Extender with boosts your video/audio transmission distance up to 60m (200ft) in HDTV 720p / 1080i format. With two low cost Cat 5/5e/6 cables, you can extend HDTV sources from DVD players, Blu-ray Disc player, PS3, PC, and any other TMDS compliant source to distant display monitors including HDMI enabled TV sets, LCD PC monitors or projectors. With the embedded IR receiving and emitting units you an enjoy high quality

audio/video and control the HDMI sources from a remote site instantly.

- HDMI 1.3c compliant
- Extends the transmission distance up to 60m from the sources under 1080i or 720p
- Extends the transmission distance up to 40m from the sources under 1080n
- Provides independent DDC channel, fully HDCP compliant
- · Minimises the cable skew by adjustable 8-level equalization control
- Embedded IR control path

Specifications	
Video bandwidth	Single-link 225MHz (10.2Gbps)
Video support	480i / 480p / 720p / 1080i / 1080p
Transmission	Full HD (1080p): 40m (130ft) CAT5e/ 50m (165ft) - CAT6
HD (720p/1080i)	50m (165ft) - CAT5e / 60m (200ft) - CAT6
Audio support	Surround sound (up to 7.1ch) or stereo digital audio
Equalisation	8-level digital on RX
Input	1x HDMI, 2x RJ-45, 1x 3.5mm
Output	2 x RJ-45, 1 x 3.5mm, 1 x HDMI
Carrier frequency	38kHz
Power supply	5VDC @ 4A
Dimensions	80(L) x 60(W) x 25(H)mm



Cat. Qty 2+ Qty 4+ AC-1689 \$169.00 \$151.95

See page 206 for Cat5 Core Stranded **Network Cable**

IR EXTENDERS

IR Remote Control Extender to suit PayTV

Control a VCR, DVD/Blu-ray player, Hi-Fi and PayTV box (including most modern ones) from another room up to 30m away. This clever design uses a battery shaped transmitter that replaces one of the batteries in the remote control. With some electronic smarts it is able to repeat the Infrared signal to the receiver in the other room to control the AV equipment. The AAA sized transmitter includes a rechargeable battery, which lasts for months before needing a recharge, and a AA adaptor for use in larger remotes. The receiver can be either placed within 10m of the AV equipment or hidden away with the use of the small IR output cable. Supplied with transmitter, AA adaptor, two rechargeable 2/3AA batteries, receiver with power supply and IR output cable on a 1.8m lead.

Note: Remote control and batteries not included.

	ecifications	
Tra	ansmission range	30m
Fr	equency	433.92MHz
Cł	nannels	3
Di	mensions	100(Dia.) x 54(H)mm



	_			
7	Cat.	Qty 1+	Qty 2+	Qty 4+
	AR-1821	\$59.95	\$53.95	\$47.90

IR Remote Control Extender

Extend the range of your IR remote control up to 100m through walls if need be. IR commands are sent by the transmitter via 433MHz signal to the receiver in another room, then sent to the components you want to control. Great if you want to keep your home theatre components out of sight or make absolutely sure the kids turn the TV off when they're supposed to. Operates with Foxtel®(not IQ®) Mains plugpacks for transmitter and

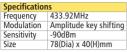
Specifications	
Transmission range	Up to 100m line of sight
Frequency	433MHz
Dimensions	100(Dia) x 120(H)mm (including antenna)



7	Cat.	Qty 1+	Qty 2+	Qty 4+
	AR-1817	\$49.95	\$44.90	\$39.90



Extend the range of your IR remote up to 30m. One of 16 coded channels can be set using by DIP switch so you'll be free from interference. Plugpacks for transmitter and receiver included. Works with Foxtel® IO®







7	Cat.	Qty 1+	Qty 2+	Qty 4+
	AR-1818	\$49.95	\$44.90	\$39.90

IR Emitter Kits

Are your home entertainment components hidden away in a cabinet? This IR Emitter Kit solves the problem and is the perfect way to simplify the way you control your home entertainment system. Many of today's home theatre / Hi-Fi systems are set up with the components hidden from view in a cabinet. Great for aesthetics and are set up with the components induced from view in a capital. Oreal to assure as security, but what do you do when you want to use the remote? You have to keep the cabinet door open, which defeats the purpose of having the components in the cabinet in the first place. You can also use it to extend the range of your IR remote control to another room, or run all your remote controlled devices from a single sensor. These IR Emitter Kits act like a hub, enabling you to interface all your IR remote controlled devices together and control them from a single sensor point Two different models are available, providing for up to six IR emitters to be connected to a single point and you can add extra emitters as you need.

Two models available:





AR-1812	AR-1814			
7	Cat.	Qty 1+	Qty 2+	Qty 4+
2 Input	AR-1812	\$79.95	\$71.95	\$63.95
6 Input	AR-1814	\$99.00	\$88.95	\$78.95

Composite AV Cat5 Balun With IR Extender

Transmit crystal-clear audio and video signals over long distances via economical Cat5 cable. You can also use it for extending the range of your remote control. The wideband IR will receive signals from many types of remotes. Simply connect stereo audio and composite video to the transmitter and receiver, then hook up the IR sensors to your equipment. The signals can be transmitted up to 300 metres on UTP.

Specifications			100		
Video	75 ohm unbalanced			400	-
Audio	600 ohm balanced				
Bandwidth Video	DC - 12MHz	Stant.			- //
Audio	50Hz - 15kHz	00		600	
Propagation distance	Up to 300m via UTP			· • •	
Power requirements	12VDC 30mA max		` _	0	
Dimensions	64(W) x 73(D) x 29(H	I)mm			
		-			TE DR
					WARRANTY
7	(Cat.	Qty 1+	Qty 4+	Qty 10+
	(OC-3681	\$89.00	\$79.95	\$70.95

Component Video Cat5 Balun With IR Extender

Component video/digital audio extender which allows transmission up to 100 metres over economical Cat5 cable. Also equipped with an Infrared extender which allows you to control channels and settings from the receiver's end. Supports up to 1080p. Mains plugpack included for receiver.

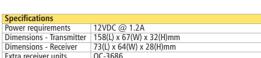
Specifications		
Interface	3 x RCA component, 1 x RCA digital audio, UTP: RJ45	
Impedance	Video 75ohm / UTP: 100 ohm balanced	LJEP!
Bandwidth	DC - 60MHz	шиннито
Transmission distance	480p: 100m, 720p: 75m, 1080p: 50m	
Dimensions	74(L) x 64(W) x 28(H)mm	
	0000	0000
7	Cat. Qty 1-	+ Qty 4+ Qty 10+
	OC-3683 \$99.95	\$89.95 \$79.95

4 Zone Cat5 AV Distribution Hub With IR Extender

Add up to four AV zones and pipe the video signals down Cat5 cable at distances up to

300m. You simply connect a composite video source with stereo audio to the transmitter, then connect up to four Cat5 cables to transmit signals via UTP wherever you need them. The kit comes with one transmitter

and one receiver and you simply add extra receivers as you need them. The transmitter also takes up to three IR emitters so you can have remote control in the other zones as well. A very cost-effective way to maximise video transmission for homes, schools, lecture halls, conference centres etc.



tera receiver arms	46 2000			(Charles and Co
1	Cat.	Qty 1+	Qty 4+	Qty 10+
Kit	QC-3685	\$199.00	\$178.95	\$168.95
Frature Describers	00.3000	too or	¢00 OF	¢76 F0

Spare IR Receiver for Cat5 Baluns

Spare or replacement receiver for QC-3686, QC-3681, QC-3683 or



71	Cat.	Qty 1+	Qty 2+	Qty 4+
	AR-1819	\$19.95	\$17.70	\$15.70

Full range of Audio/Video Senders on page 248

IR Over Cat5 Extender/Repeater Kit

Control AV source equipment up to a distance of 250 metres away with existing IR remote controls over inexpensive Cat5 cable. You simply couple one or two source devices to the repeater unit and the displays or monitors to the extender unit at the other end. The IR remote signals are piped down the Cat5 cable for full control at the remote location. Suitable for home theatre, lecture theatres, AV rooms, conference rooms, shop window and merchandising displays.

The kit contains:
• 1 x IR extender

- 1 x IR repeater
- 1 x IR emitter • 2 x IR transmitters

Receiver

· Mains plugpack







Receiver frequency Power supply 0.5\/ Power consumption Dimensions 62(L) x 50(W) x 23(H)mm





Cat. AR-1826 \$119.00

IR Over Coax Transmitter & Coupler

Simply integrates in-line with your existing coaxial cable wiring via F connectors. The IR injector will send the signals through the coax cable to a maximum distance of 150m. The IR receiver has provision for 2 transmitters for multi-component control. It could be used as a simple IR repeater or an elaborate multi-room repeater system. Suitable IR receiver AR-1819, transmitters AR-1811 & AR-1813 and mains power supply MP-3147.





11111	WARRANTY
Qty 1+	
¢0.05	

Cat.

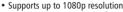
AR-1825

Video Amplifiers – AV Selectors

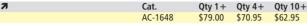
VIDEO AMPLIFIERS

4 Way AV Component Distribution Amplifier

Offering the extra flexibility of component video this AV distribution amp allows you to take advantage of HDTV on digital pay-TV and free-to-air. Distributes one set of component and stereo audio inputs to four outputs without loss or degradation. Mains adaptor included.



12VDC 500mA power supply
Dimensions: 190(W) x 90(H) x 23(D)mm



4 Way AV Stereo Distribution Amplifier

Designed to split a stereo AV signal across 4 channels without loss of image or sound quality. You can wire the rumpus room, outside entertainment area, bedrooms, lounge room or anywhere else you would like to access audio and video from a central source. You can also use it to record to up to four sources at the same time. 12VDC operated. Mains plugpack and input cable included.

- Composite video input 1-3Vpp; 75 ohms Stereo audio input -20dB; 25k ohms
- 4 x Composite video outputs 1Vpp output: 75 ohms
- 4 x Stereo audio outputs
- RCA Input & output connectors

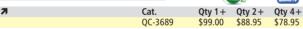
• Dimensions: 176(W) x 90(H) x	25(D)mm			LIEHR WARRANTY
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1646	\$79.95	\$71.95	\$63.95

Cat5 AV 4 Way Distribution Wallplate Hub

An integrated solution for extending AV signals over Cat 5 cable. The entire hub is contained in a wallplate assembly and allows extension of up to 300m. Inputs are composite and component video, analogue or digital audio as well as a built-in infrared extender for full settings control. Includes transmitter, receiver, IR emitters and power supply.



Bandwidth video DC - 12MHz
Bandwidth audio 50Hz - 15kHz
Power supply 12VDC 500mA



Video Data & Power to Cat5 Combiner

Combine composite video, data (RS422, 485) and camera power over one standard Cat5 cable.

- 2.5mm DC socket
- Male BNC with mini-coax fly leads to RJ-45 socket
- Transmission range: 300m colour 600m B&W
- PTC fuse for short circuit protection
- · Length 330mm
- Supplied as a pair

7	Cat.	Qty 1+	Qty 2+	Qty 4+
	QC-3433	\$49.95	\$44.90	\$42.45

AV BALUNS

Powered CAT5 VGA Baluns with Audio

Able to transmit VGA and audio signals across a standard UTP or STP CATS cable for distances up to 300 metres. Adjust the brightness and skew of the image with the peak and gain options. Use for home or commercial applications, for example, classrooms, lecture halls, auditoriums, retail kiosks, video information displays, tradeshows, etc. Ideal for VGA monitors or LCD

projection screens. Supports up to 1920 x 1200 pixels. Supplied as a sender and receiver pair with plug packs

Power requirements: 5VDC for

- both sender and receiver Sender dimensions: 100(L) x 65(W) x 26(H)mm
- Receiver dimensions: 81(L) x 43(W) x 23(H)mm
- Vertical frequency range: 60/75/85Hz Supported resolutions: 640X480, 800X600, 1024X768, 1280X720, 1280X768, 1280X960, 1280X1024, 1600X900, 1600X1200, 1920X1080, 1920X1200
- Includes 2 x right angle mounting brackets for send unit

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1671	\$119.00	\$106.95	\$94.95

AV BALUNS WITH WALLPLATES

Audio/Video Balun with Wallplate

This excellent range of multimedia extenders make AV distribution a snap. They transmit audio and video signals up to 300m over standard Cat5 UTP network cable and are available for both component video and composite video signals with and without audio. They are perfect for AV distribution systems in offices or home theatre applications etc. All models supplied as a pair.

Common Specifications

- Video level 1Vp-p
 Video bandwidth OHz to 5MHz
- Audio bandwidth 50Hz to 15kHz
 Interconnecting cable Cat5/5e
- Transmission range up to 300m
 Dimensions: 70(W) x 115(H) x 61(D)mm

Several models available:

LT-3037 Composite video, mono sound, DC power (up to 12 volts) Component / RGB video LT-3038 LT-3039

Component / RGB video and digital audio



LT-3037



This excellent range of multimedia extenders transmit AV signals up to 300m over Cat5 network cable!





LT-3038

LT-3039

7	Cat.	Qty 1+
Composite Video, Mono Sound	LT-3037	\$29.95
Component / RGB Video	LT-3038	\$29.95
Component / RGB Video & Digital Audio	LT-3039	\$29.95

For other wallplates see pages 234 & 316

AV SELECTORS. SWITCHES & CONVERTERS

2 Way AV Selector Switch

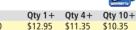
Switch between two composite video and stereo audio sources.

Easy push-button operation.



	•	0 0	•	•	•	•	Ва
Specificat							
Channel S	eparati	on	60	dB @	و 1k	Hz	

Specifications	
Channel Separation	60dB @ 1kHz
Cross-talk	70dB @ 1kHz
Dimensions	135(W) x 50(D) x 32(H)mm

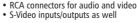


AC-1650 \$12.95 2 Way AV Selector Switch with S-Video

Cat.

The unit accepts 2 sets of composite or S-video inputs in addition to stereo audio. It will allow a DVD player, game console or video camera to be permanently

connected so you can switch between what is displayed on your TV easily.



Specifications	
Channel Separation	60dB @ 7kHz
Cross-talk	70dB @ 1 kHz)
Dimensions	180(W) x 35(H) x 70(D)mm



71	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1651	\$16.95	\$14.95	\$13.35

AV SELECTORS, SWITCHES & CONVERTERS (CONTINUED)

4 Way AV Selector

Connect up to four AV devices such as DVD players, VCRs or gaming consoles with a single output to your TV and switch between them as required.

- Inputs can be either composite or S-video.
- Easy-to-use pushbutton front panel.
 Composite and S-video inputs
- Dimensions: 190(W) x 112(D) x 47(H)mm



Cat. Qty 1+ Qty 4+ Otv 10+ AC-1652 \$24.95 \$22.35 \$19.70

4 Input AV Switcher with Remote

Switch between four composite or S-Video inputs, including stereo audio, and output to composite or S-Video. Control selector via remote. 9VDC mains adaptor included. remote requires

2 x AAA batteries

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• Dimensions: 200(W) x 45(H) x 108(D)mm







Remote Control AV Selector

Say goodbye to connecting and reconnecting cables because you have run out of AV inputs on your home theatre system. This device eliminates cable hassles, using the Remote AV Selector you can add up to 3 AV sources to your Home theatre's AV inputs. Easily switch between devices like DVD players, Satellite receiver or game consoles using the front panel or remote control

AC-1653

Input: 3 Sets Output: 1 Set Connectors for input: 3 TOSLINK Optical Jack

3 S-Video Jack

3 Composite Video jack 3 Stereo Audio Jack (R/L)

Connectors for output: 1 TOSLINK Optical Jack

S-Video Jack





	nemote control	l		WARRANTU
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC 1674	400.00	¢70.0E	¢70.0E

AUDIO SWITCHES

3 Way Audio Selector

Many audio amplifiers don't provide enough inputs for all your components. Solve that problem easily with this 3way audio switcher. It takes up to three stereo RCA inputs and provides a single stereo RCA output. Easy-to-use pushbutton front panel

• 3 stereo pairs of RCA inputs

 Dimensions: 133(W) x 42(H) x 85(D)mm



,	()				WARRANTY
7		Cat.	Qty 1+	Qty 4+	Qty 10+
		AC-1655	\$15.95	\$14.35	\$12.70

4 Way Optical Switch Box

With the digital age evolving rapidly, more home theatre and Hi-Fi systems are utilizing the superior reproduction of digital audio. As a result, you may find yourself with optical outputs from your DVD, MD, or CD Players and only 1 optical receiver. This will switch between 4 inputs (3 x Toslink & 1 x 3.5mm optical) to 1 toslink optical output.

- A 1m Toslink cable is also included.
- Weight: 234g
 Dimensions: 190(W) x 78(D) x 36(H)mm



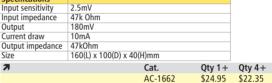
Turntable Preamp Switch Box

Many modern amplifiers do not have a phono input for a turntable. This preamplifier/ switch box fixes that problem and also provides two selectable inputs to a stereo line level output which feeds into the auxilliary

input on your stereo amplifier.

Requires 12VDC mains adaptor (use MP-3011)





AUDIO CONVERTERS

RCA to USB Digital Converter

Studio quality recording solution. Suitable for converting any line-level audio device to USB for stereo PC recording RCA to USB converts analogue to digital audio in high resolution. Simply install

Magix Audio Cleaning Lab SE & Audacity software included to import your music & optimise sound recording quality.

- · Gold plated terminals
- · Recording software included

Specifications	
Digital Audio Output	16-bit 44.1kHz
Suitable	PC & MAC
Cable Length	1.2m



Digital Toslink/Coax Audio Converter





Photology day

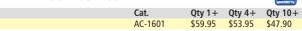
Otv 10+

\$19.70

Most equipment manufacturers use different digital audio input/output formats and cannot be easily interfaced with one another. With our handy little digital audio converter, you will never be caught out with the wrong digital audio connection ever again. A very compact unit, it will convert digital audio from either coaxial or Toslink inputs and outputs to Toslink or coax. It also has a built-in amplification feature: it can serve as a repeater of audio signals and extend (double) the transmitting distance.

- · LED power indicator
- Supports two-way conversion: Coaxial to Toslink or Toslink to coaxial.

 Compact and easy to setup
- Dimension: 46(W) x 46(D) x 24(H)mm



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AV Converters & TV Wall Brackets

AUDIO CONVERTERS (CONTINUED)

Digital to Analogue Audio Converter

This handy little unit will convert your uncompressed digital audio from either a coaxial or of optical source to a standard analogue left and right RCA output! Useful for connecting DVD/Blu-Ray players to displays or audio equipment that have no digital audio input.

- Integrated digital interpolator filter and D-A converter
- Stereo audio outputs
- · Designed to convert uncompressed digital audio to analogue (compressed digital audio such as Blu-ray 5.1 or 7.1 will not be converted)
- 2LPCM (does not convert AC3)
 Dimensions: 42(W) x 40.5(D) x 22(H)mm



Annual 1 1 1 1 1 1 1

USB HD Audio

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1603	\$69.95	\$62.95	\$55.95

USB 2.0 Audio Converter

This handy device allows you to output audio from your PC or Apple® computer in high fidelity 24-bit 192kHz audio. Audio can be output via Toslink Optical, RCA analogue, or direct to headphones. Simply connect to your computer via USB and you're away! The device can output concurrently to analogue (RCA & headphone) and digital (optical Toslink).

No power required, drawing power from the USB port itself.

- Compatible with Windows and Mac OSX platforms USB 2.0 connectivity

- 6.5mm headphone output, 2 x RCA output, and Toslink



compact acsign	medsures just os(vv) x os(b) x ss	(11)11111		
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	ΔC-1616	\$149.00	\$133.95	\$118.95

HDMI Audio Extractor

Have you upgraded to the latest and greatest HD device or Blu-ray player, only to discover that your existing home theatre system does not support HDMI? Do not despair! This nifty device will extract the audio signal from your HDMI source and redirect it for use via an optical or standard left/right RCA output for amplifier or home theatre connectivity.

- Supports 3D signal Compliant with HDMI 1.3, HDCP 1.2 and DVI 1.0
- Supports HDMI Sample Rates up to 192 kHz Supports Optical Sample Rate up to 48 kHz HDMI Audio Format: PCM2/5.1/7.1, Dolby 5.1,
- DTS 5.1, DD+, D-TrueHD, DTS-HD
 Optical Audio Format: PCM2, Dolby 5.1, DTS 5.1
- Dimensions: 91(W) x 86(D) x 34(H)mm

7		Cat.	Qty 1+	Qty 4+	Qty 10+
	With Audio Out	AC-1635	\$169.00	\$151.95	\$134.95

HDMI Stereo Audio Inserter

This unit accepts either an analogue RCA line input or a digital toslink audio input and combines it to the high definition HDMI signal. Supports stereo or surround sound audio signals, making it ideal for video editing applications, shop and commercial displays or an addition to your home cinema



- Supports 3D signal
 Compliant with HDMI 1.3, HDCP 1.2 and DVI 1.0
 Supports HDMI sample rates up to 192 kHz

- Supports Optical sample rates up to 48 kHz

 HDMI Audio Format: PCM2/5.1/7.1, Dolby 5.1,
 DTS 5.1, DD+, D-TrueHD, DTS-HD

 Optical Audio Format: PCM2, Dolby Digital,
 DTS Digital audio 5.1

 Dimensions: 90.7(W) x 85.8(D))) x 34(H)mm			шининто
7	Cat.	Qty 1+	Qty 4+	Qty 10+
With Audio In	AC-1636	\$169.00	\$151.95	\$134.95

RCA Stereo Audio Signal Volume Leveller

Not all TV stations are created equal, and neither are their volume levels. This volume leveller regulates TV channel volume to the most comfortable listening level, preventing disturbing fluctuations while you channel surf, as well as taming those obnoxious commercials. Features a simple on/off switch and easy installation.

- Regulates TV, satellite, radio and DVD volume
 Mains power supply included
 Includes 90cm stereo RCA cable (male to male)

- Boosts low and high-frequency content dynamically Measures: 42(W) x 42(D) x 22(H)mm
- Cat Qty 4+ Qty 10+ AC-1614 \$99.00 \$88.95 \$78.95

Ground Loop Isolator (Stereo) RCA

Used to eliminate ground loop problems (usually manifested as a low hum) in audio connections. Earthing brown ground wires sometimes helps even more. Secured to a solid object with cable ties. Very neat!



7 1 Ca	at.	Qty 1+	Qty 4+	Qty 10+	
A/	A-3084	\$9.95	\$8.75	\$7.75	

ABOUT VESA MOUNTING STANDARDS

The Video & Electronics Standards Association (VESA) has issued suggested standards for the attachment mounting systems for electronic visual displays also known as the Flat Display Mounting Interface. This is a family of standards defined by VESA for mounting flat panel monitors, TVs and other displays to stands or wall mounts, it is used on most modern flat-panel monitors and TVs.

Whilst these standards are quite detailed the basic details of the standards involve the size of the display and the relevant spacing and sizing of the hole to mount the display. The dimensions vary from 75 x 75mm to 800 x 400mm

COMPARISION CHART FOR PLASMA-LCD-LED TV WALL BRACKETS

Cat No	Screen Size	Max VESA Dimensions	Max Weight	Horiz. Adj.	Vertical Tilt Adj.	Depth from Surface Bracket Dimension (HxWxD)
CW-2826	23" to 37"	400 x 200	45kg	No	0° to 5°	38mm 525 x 348 x 38mm
CW-2822	32" to 60"	600 x 400	80kg	No	+/-15°	80mm 815 x 510 x 80mm
CW-2829	23" to 37"	400 x 200	45kg	180°	-12°	73 - 623mm 528 x 350 x (73-623)mm
CW-2825	32" to 60"	600 x 400	80kg	180°	+/-15°	115 - 665mm 815 x 510 x (115-665)mm
CW-2836	23" to 55"	400 x 400	25kg	no	0° to 15°	19mm 490 x 425 x 19mm
CW-2838	40" to 65"	600 x 400	25kg	no	0° to 15°	19mm 690 x 425 x 19mm
CW-2852	32" to 55"	400 x 400	25kg	180°	0° to 15°	32 - 642mm 420 x 400 x 32 - 642mm
CW-2835	23 to 37"	400 x 400	30kg	+/-20°	NA	35 - 190mm 485 x 265 x 35 - 190mm
CW-2837	32 to 60"	600 x 400	50kg	+/-20°	-15°	73 - 193mm 682 x 498 x 73 - 193mm

Ultra Slim LED/LCD Tilting Wall Mounts

Ultra thin tilting wall brackets for new LED/LCD TVs allow 15° of tilt and mount only 19mm from the wall once closed for optimal viewing experience. Heavy duty steel construction for maximum support and effortless adjustment designed to give your expensive TV a professional look. Mounting hardware and instructions included.

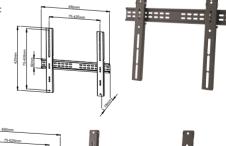


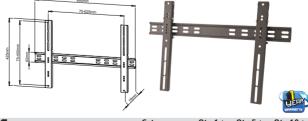
- Load capacity up to 25kg VESA standard complaint

Mounting profile: 19mm

Two models available: For 23" - 55" LCD/LED TV Sets CW-2836

For 40" - 65" LCD/LED TV Sets CW-2838





7	Cat.	Qty 1+	Qty 5+	Qty 10+
23" - 55"	CW-2836	\$39.95	\$35.90	\$31.90
40" - 65"	CW-2838	\$49.95	\$44.90	\$39.90

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Home Theatre Mounting Brackets

HOME THEATRE EQUIPMENT MOUNTING BRACKETS

Plasma/LCD/LED TV Wall Brackets

No longer is it an expensive exercise to impress your friends and neighbours with the contemporary styling of a wall mounted LCD or Plasma TV. Our range of universal LCD and plasma TV brackets will be perfect for most installations, suiting panel sizes from 23" up to 60" and weighing up to 80kg - and the prices will leave plenty of room in the budget for a new set of AV cables and wall plates to complete the installation.

- Models available to suit Plasma/LCD/LED TVs from 23" 60"
- Safety lock for security (CW-2822 and CW-2826 only)
 VESA standard compliant
- Solid steel construction

Mounting hardware and instructions included

Four types available:

SUITS PANELS 23" TO 37" - 45kg Is the smallest model, designed for LCD TVs from 23 - 37" in size and weighing up to 45kg. Despite the low price, it's still solidly made and features a security locking bar. It can be mounted flat or at a fixed tilt angle of 5°, whilst the TV is only spaced 38mm from the wall. Mounting plate is 525mm wide. Cat. CW-2826

SUITS PANELS 32" TO 60" - 80kg

Is the basic model for the larger LCD and plasma TV sets, suitable for panel sizes from 32 to 60° and weighing up to 80kg. This model has an adjustable tilt feature to allow +/-15° tilt and will position the TV 8cm from the wall. Also features a security locking bar to deter against theft. Mounting plate allows installation on either 450 or 600mm stud centres

Cat. CW-2822

SUITS PANELS 23" TO 37" - 45kg

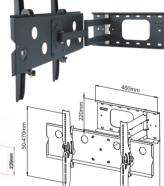
Provides full motion off the wall. The 620mm extension arm gives a range of rotation of 180° and tilt of -12°, so it is ideal for mounting in the corner of a room, or mounting the TV in an otherwise awkward and unviewable position. This model also allows for ateral roll to ensure the TV is perfectly level after installation. Accommodates TVs from 23 to 37 up to 45kg. Cat. CW-2829

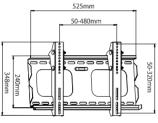
SUITS PANELS 32" TO 60" - 80kg Provides full motion. The 660mm extension arm gives a range of rotation of 180° and tilt of $\pm 15^\circ$, so is ideal for corner mounting, or mounting the TV in an otherwise awkward and unviewable position. It also allows for $\pm 2^{\circ}$ lateral roll to ensure the TV is perfectly level after installation. This model also accommodates TVs from 32 to 60", up to 80kg, and installation on 450 or 600mm stud centres Cat. CW-2825

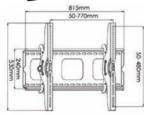












815mm 50-770mm	_,	-			480r
22222222	50-480mm	50-325mm	50.	496mm	TART
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7		Cat.	Qty 1+	Qty 5+	Qty 10+
	Suits panels 23" to 37" - 45kg	CW-2826	\$59.95	\$53.95	\$47.90
	Suits panels 32" to 60" - 80kg	CW-2822	\$89.95	\$80.95	\$71.95
	Suits panels 23" to 37" - 45kg	CW-2829	\$109.00	\$97.95	\$86.95
	Suits panels 32" to 60" - 80kg	CW-2825	\$149.00	\$133.95	\$118.95

Ultra Slim LED/LCD Articulating Wall Mounts Tilt, pan and swivel for maximum viewing flexibility - perfect for corner mounting your new flat screen TV. This ultra thin articulating wall bracket for new slim-line LED/LCD TVs allows 15° of tilt and 180° of swivel while

mounting the TV only 32mm from the wall at minimum, and 642mm at full extension. Solid aluminium and steel construction for stable installation

Motorised Brackets for Flatscreen TV/Monitors

Both the 30kg & 50kg models below will swivel a flat panel TV +/-20° left or right. The 50Kg model will also tilt 0-15°. Either mount will fit standard VESA 200, 300 or 400mm and are virtually silent.

- 230VAC power by plugpack.Remote control included

30KG

Cat CW-2835

Specifications

Max tilt angle

Memory

TV weight

Weight

Max swivel angle

Projection distance



150mm

+/-20

3-position

10 - 30ka

N/A



Specifications

Max tilt angle

Memory

Weight TV weight

Projection distance

Max swivel angle





180mm

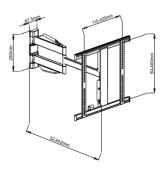
3-position 9.3kg 30 - 50kg

CRAZL

15° +/-20°

and nylon washers for fluid movement. Also features a cable management system to protect and conceal cables for a clean clutter-free look. Mounting hardware and instructions included.





Specifications				
Tilt	15°			
Swivel	180°			
Mounting profile	32mm			
Maximum extension	642mm			_
Load capacity	up to 25kg			
Suitable for	32-55" flat screen TVs			WARRANTY
_	_			
71	Cat.	Qty 1+	Qty 5+	Qty 10+





	7							
+		Suits	Panels	23	to	37"	- 3	30k
		Suits	Panels	32	to	60"	- 5	50k

C	at.	Qty 1+
C	W-2835	\$199.00
C	W-2837	\$359.00

www.iavcar.com.au

Freecall order hotline: 1800 022 888

CW-2852

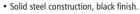
\$119.00 \$106.95

Projector & Monitor Brackets

VESA BRACKET ADAPTOR

Universal VESA Adaptor

Adapt any VESA mounting TV to any bracket. Many LCD or plasma brackets on the market are only designed to take TVs with standard 200mm or larger mounting centres, thereby limiting the range of brackets you can use with some TVs. This handy adaptor solves the problem by providing centres for 100, 200 and 300mm VESA mounts.





Cat.	Qty 1+	Qty 5+	Qty 10+
CW-2815	\$24.95	\$22.35	\$19.70

WALL BRACKETS

Monitor Wall Brackets

DOUBLE ARM LCD MONITOR BRACKET

DOODLE ARM E	CD MONITOR BRACKET	. .
Specifications		
Туре	LCD Double Swing Arm, Wall Mounting	20
Max Weight	22kg (50lbs)	
Mounting System	VESA 50 x 50, 75 x 75, 100 x 10	00
Tilt Angle	5° up, 20° down	
Swivel Angle	160° left & right	UAR WAR
		WARF

Cat. CW-2813

LCD MONITOR WALL BRACKET

Specifications	
Туре	Wall Mounting
Max	Weight: 5kgs (11lbs)
Mounting System	VESA 50 x 50, 75 x 75, 100 x 100
Tilt Angle	20° up and down
Swivel Angle	120° left and right

Cat. CW-2814

7		Cat.	Qty 1+	Qty 5+	Qty 10+
	Double Arm LCD	CW-2813	\$69.95	\$62.95	\$55.95
	LCD Wall	CW-2814	\$39.95	\$35.90	\$31.90

PROJECTOR BRACKETS

CEILING-MOUNT

Designed to fit most of the projector models on the market, this bracket can be rotated through a full 360° and extends to over 300mm. Suitable for home theatre, conference rooms, AV rooms, media centres etc. Mounting hardware and instructions included.

- Rigid extruded aluminum construction
- Durable silver powder-coated finish
 Supports up to 15kgs

- Easy to installCable management included
- Mounting hardware included User manual included
- Dimensions: 182(W) x 235 310(H) x 182(D)mm Cat. CW-2827

7	Cat.	Qty 1+	Qty 5+	Qty 10+
Projector Mount	CW-2827	\$79.95	\$71.95	\$63.95

THE DIGITAL TV SWITCHOVER IS HERE

The time has finally come where old analogue TV transmissions are being switched off, and Digital TV is replacing them in full. Some areas in Australia have already experienced the Analogue TV "switch off", and many more areas across the country will be following suit in the very near future. In fact, by the end of 2013 there will be no more analogue TV transmission in Australia; everything will be Digital.

So now is the time to upgrade!

In some cases, you will not need to make any changes other than to replace your TV with a new unit with a Digital TV tuner, or simply install a Digital TV set-top box. However you may find that your signal is intermittent, especially on bad weather days. Often in these cases, replacing the antenna, antenna cabling and connection points to versions specifically designed for Digital TV are sure fire methods to improve reception, and will ensuer top quality reception for decades to come. If you have multiple antenna outlets within your home, you may also consider fitting a masthead amplifier to ensure you have enough signal to each outlet point.

We have all the products you need for a DIY Digital TV install:

- High quality Digital TV antennas
 F-type cable connectors and outlets
 Masthead amplifiers
- Digital TV set-top boxes

For info on the Digital TV Switchover, visit www.digitalready.gov.au

LCD Computer Screen Desk Brackets

Desk space, the final frontier. If your desk is clogged with notes, manila folders and finding space is becoming a dangerous balancing act, then you need an LCD bracket. These brackets use a C-type clamp for a powerful lock onto a variety of desk thicknesses. The monitor can swivel horizontally, tilt vertically, and extends to approximately 400mm from the base. For an extra bit of



customisation, the monitor can be rotated from portrait to landscape, which is especially useful for the double screen model. To bolster desk neatness, easy to open cable clips run along the structure of the bracket to house your DVI cable, monitor power cable or any other cable that requires monitor connection. Both brackets feature a sleek matte black finish for an inconspicuous blending into your desk motif. Suitable for monitors up to 27"

included

SINGLE SCREEN

- VESA mounting (75mm x 75mm and 100mm x 100mm)
- Fully adjustable arms
- Rotate monitor from landscape to portrait

Specifications	
Max load	10kg monitor
Swivel	360°
Rotate	360°
Dimensions	455(H) x 490(L)mm

Cat CW-2831

DOUBLE SCREEN

- VESA mounting (75mm x 75mm and 100mm x 100mm)
- Fully adjustable arms
 Rotate monitor from landscape to portrait

Specifications	
Max load	10kg monitor
Swivel	360°
Rotate	360°
Dimensions	455(H) pole height, each arm 490(L)mm

Cat CW-2833

			00		WARRANTY
7		Cat.	Qty 1+	Qty 5+	Qty 10+
	Single Screen Bracket	CW-2831	\$49.95	\$44.90	\$39.90
	Dual Screen Bracket	CW-2833	\$69.95	\$62.95	\$55.95

SPEAKER BRACKETS

Adjustable Wall Speaker Bracket

If your listening room is a bit short on real estate, the answer may be to mount your speakers on the wall with a set of brackets. These brackets can be adjusted horizontally, vertically to tilt up to 20° or to fit speakers up to a depth of 370mm and as small as 80mm. Ideal for conference rooms, AV rooms, studios or small rooms where space is limited. Supplied as a pair.



		-		
71	Cat.	Qty 1+	Qty 5+	Qty 10+
Pair	CW-2840	\$39.95	\$35.90	\$31.90

DVD PLAYER BRACKET

Glass Wall-Mount DVD Player Brackets

Wall mount your DVD player or any other component right under your flat-screen TV. Tempered glass shelves and black anodised aluminium finish to complement modern décor. Also features cable management.

SINGLE SHELF

Dimensions: 455(W) x 355(D) x 275(H)mm

71	Cat.	Qty 1+	Qty 5+	Qty 10+
Single Shelf	CW-2830	\$49.95	\$44.90	\$39.90



SET-TOP BOXES

Digital Set-Top Boxes - Standard Definition (SD)

If you have an older TV that doesn't have a digital tuner, you will need a DTV set top box that will receive and decode the signals so they can be displayed. With these set top boxes you can enjoy more channels, extra features and clearer reception on your old analogue TV at an excellent price. Effortless navigation of the user interface is done with the supplied remote control to browse through the available channels, display settings and other options.

ECONOMY STANDARD DEFINITION

DTV SET-TOP BOX

With composite video and audio left and right outputs.

- · Decodes standard definition digital TV signals
- Aspect ratio support: 16:9, 4:3
- letterbox, 4:3 panscan Supports PAL and NTSC
- DVB-T/MPEG-2 compatible
 Remote control included
- Dimensions: 120(W) x 35(H) x 100(D)mm
- Spare remote: Cat. XC-4913 (sold separately) Cat. XC-4914



NOT AVAILARLE IN NEW 7FALAND

7	Cat.	Qty 1+		
Economy Standard Def DTV Box	XC-4914	\$19.95		
7	Cat.	Qty 1+	Qty 4+	Qty 10+
Spare Remote Control for XC-4914	XC-4913	\$7.95	\$6.95	\$6.25

RELATED PRODUCT See our new PavTV IR Remote Control Extender on page 239

DIGITAL SET-TOP BOX - HIGH DEFINITION (HD)

HD Digital TV Set-Top Box with USB Recording Playback

Digital and HD ready. This compact set top box unit receives crystal clear free-to-air digital TV in high definition. It incorporates a USB port for AV program recording as well as playback. Navigation is simple and easy with the full function remote control. Outputs are HDMI, component video and composite video.

- On-screen menus
- Selectable aspect ratio 4:3/16:9
 DVB-T & MPEG-2 HD & SD compliant
- Supports up to 1080i resolution
- Remote requires 2 x
- AAA batteries.

 Dimensions: 220(W) x 140(D) x 42(H)mm
- Spare remote: Cat. XC-4915 (sold separately)





NOT AVAILABLE IN NEW ZEALAND

7		Cat.	Qty 1+	Qty 4+	Qty 10+
	HD Set top box	XC-4917	\$69.95	\$62.95	\$55.95
	Spare Remote Control	XC-4915	\$9.95	\$8.75	\$7.75

12VDC HD Digital Set Top Box

Great for use on the road, this high definition set top box will pickup all the digital channels on offer in your locale. You can also plug in a USB drive and record TV in MPEG2 format to watch at a later date.



- · Output: HDMI, Composite, RF · USB port for recording and playback
- Cigarette lighter cable included Suitable antenna LT-3143
- (available separately)
 Dimensions:154(W) x 117(D) x 40(H)mm





7	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4921	\$69.95	\$62.95	\$55.95

Many people think that, because they are relatively inexpensive Standard Definition Set Top boxes are somehow inferior. High Definition set-top boxes are really only justified for large-screen TVs - typically 90cm (diagonal) or larger. If you only want to feed a CRT type TV or a small flat screen standard set-top boxes will deliver the resolution that will not be a limiting factor.

STANDARD DEFINITION DTV SET TOP BOX

WITH RECORDING OUTPUT

Unit features a USB port for AV recording as well as playback. With composite AV and S-video plus digital audio and analogue left and right audio outputs.

- Decodes standard definition digital TV signal
- Aspect ratio support: 16:9, 4:3 letterbox, 4:3
- Supports PAL and NTSC
- USB port for listening to MP3s and viewing pictures
- RF output / inputDVB-T/MPEG-2 compatible
- Remote control included
- Dimensions: 189(W) x 40(H) x 117(D)mm
- Spare remote: Cat. XC-4911(sold separately)

Cat. XC-4912 NOT AVAILABLE IN NEW ZEALAND

7	Cat.	Qty 1+		
Standard Def DTV Box	XC-4912	\$24.95		
7	Cat.	Qty 1+	Qty 4+	Qty 10+
Spare Remote Control for XC-4912	XC-4911	\$7.95	\$6.95	\$6.25

High Definition DVB Twin Tuner with USB Record & Playback

More than your average HD set top box. This has a built-in twin tuner you can watch one program whilst recording another directly to an external flash drive or USB device. This jammed packed tuner is HD ready features resolution up to 1080i as well as an FM tuner. It has two USB ports; the front for easy record or playback access whilst the rear is ideal for hard drive connectivity for hundreds of hours of recording.

Features HDMI, component video, composite video outputs as well as RCA stereo and optical audio. Remote requires 2 x AAA batteries.

- Subtitle function
- On-screen menus
 Favourite channel presets
- · Teletext decoding
- · Electronic program guide FM radio tuner
- · Full function remote control

NOT AVAILABLE	II
NEW 7FALAND	



NEW ZEALAND				WARRANTU
7	Cat.		Qty 4+	
	XC-4919	\$169.00	\$151.95	\$134.95

Dual HD DVB TV Tuner and Recorder with HDMI

So much more versatile than just a tuner or HDD recorder. You can record directly to the internal hard disk or to an external flash drive or other USB device. The HDD is easily accessed via the front panel, so can be easily changed in case you need to increase capacity. You can also use it as an FM radio tuner. It supports high-definition resolution up to 1080i and includes a full

function remote control.

- Subtitle function On-screen menus
- Favourite channel presets Teletext decoding
- Electronic program guide Full function remote control
- MEPs compliant

HDD capacity Video decoder 320GR MPEG 2, MPEG 4 Up to 1080i 2 x HDMI Video resolution Inputs HDMI, composite, component, S-video RCA, S/PDIF, optical Video outputs Audio outputs 12VDC 2A Power supply 292(W) x 230(D) x 55(H)mm Dimensions

NOT AVAILABLE IN NEW ZEALAND



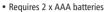


7	Cat.	Qty 1+	
	XC-4918	\$199.00	

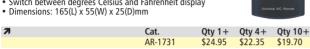
REMOTE CONTROLS

Universal Remote Control for Air Conditioners with Backlit LCD

A feature rich replacement for a lost or broken air-con remote. The unit has an easy to read blue backlit LCD for night control and all the buttons you'll need to control most functions of your air conditioner. Standard temperature controls, swing, vane, fan, timer, sleep mode and more are all featured on the control. This unit is compatible with most air conditioners capable of identifying with up to 2000 models. It also conveniently shows the time.



- Includes mountable cradle for remote
 Switch between degrees Celsius and Fahrenheit display

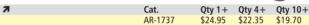


Remote Control for Recordable Digital Pay TV

Replace your lost or broken pay TV remote control at a fraction of the cost of the genuine brand names, or just keep a spare. Including buttons to control the special record, live pause and playback features of the latest recordable digital Pay TV services, you will have complete control over your Recordable Pay TV subscription.

- Compatible with recordable pay TV set top boxes
- Operates all TV essential functions
- Includes controls for record, live pause and playback features
- Requires 2 x AA Batteries
 Approx 210mm long

NOT AVAILABLE IN NEW ZEALAND



6 in 1 USB Programmable Universal Remote Control

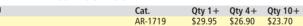
Unlike a conventional universal remote control, the database of codes for this remote control is stored on, accessed and shared via your PC. Use the provided software for easy setup or to individually assign a function to each button. Regular updates ensure the database is up-to-date and that a new upgrade (a TV for example)

doesn't render your remote control useless. Not only can it learn new IR codes, but should you forget the make and model of your device, it can search for a set of IR codes that best matches the remote control

- Control up to 6 devices (TV_SAT_DVD/VCD_AUX)
- Database search, database import, export and upload
- Completely customisable or use original remote control setting
 Regular database updates

- IR code learning
 Up to 4 macro buttons
 Advanced IR code search
- Requires USB2.0, plug and play, no additional drivers required
 Requires 3 x AAA batteries (not included)
- USB cable supplied
- Compatible with Windows 2000/XP/Vista/7
 Dimensions: 190(L) x 48(W) x 20(D)mm

Note: Button colours may vary to one pictured here





DID YOU KNOW...

John Logie Baird (1888-1946)

In a period of scarcely three years from 1924 to 1927, John Logie Baird invented the first successful mechanical-electric television system, infrared television (dubbed "Noctovision"), stereoscopic television, and the earliest means of recording a television

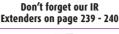
signal, Phonovision. There were two other inventors who have a claim on the "first," or at least on very early television: Philo T. Farnsworth (1906 – 1971) and Charles Francis Jenkins (1867 – 1951). If one defines television as the transmission of any sort of moving image -- even a silhouette -- by wire or wireless, Jenkins is only a few months behind Baird. If, on the other hand, you define it as the invention of a fully electronic system for the transmission of images -- which, after all, was to be the ultimate mode of transmission for the rest of the twentieth century, then Farnsworth stands alone.

Touchscreen 8 in 1 LCD Remote Control

Program up to 8 devices in your home entertainment system You can use the learning function or the pre-programmed code library to enrol each component or use the macro functions to program up to 100 keystrokes. For each different device, the LCD backlight is colour coded for easy recognition and you can change the device key layout as you like. Reguires 4 x AAA batteries. RELATED PRODUCT

- Auto power-off after 10 minutes
- Low power indicator
- Dimensions: 195(L) x 65(W) x 21(H)mm





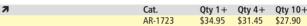


Qty 4+ Qty 10+ AR-1728 \$39.95 \$35.90 \$31.90

Universal Remote Control with Keyboard

As televisions morph into fully connected displays that can perform most of the functions of a simple PC, the need for remote controls with greater functionality becomes evident. This unit combines the with greater functionary becomes evident. This unit Combines the key layout of a standard remote for controlling TVs, Blu-ray/DVD players and when you flip it over you have a full QWERTY keyboard with optic finger navigation for typing text into web browsers, using instant message programs on your smart TV/media player, or playing games. It is a learning remote so it's easy to give it the capability of all your remote controls in the one simple package.

- 45 kevs for remote
- 37 keys for keyboard
 Option finger navigation • IR receiver
- Includes 2 x CR2025
- hatteries
- Dimensions: 167(L) x 51(W) x 15.3(D)mm

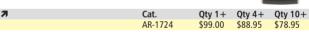


8 In 1 Pre-Programmed & Learning Remote

Our most advanced programmable remote control yet! This 8 in 1 out hiost advanced programmable reinfold Control yet. This is all I pre-programmed and learning remote has a full colour LCD display and a rotary switch to easily toggle between devices. Online database support enables for you to update the codes through the USB interface. Full button backlight allows easy setting navigation in the dark. Ergonomic in design, it has a rubber paint finish for comfortable feel. Unit can be configured to transmit in RF or IR. Requires on 4 x AAA batteries (not included).

- Code Setup Macro Function
- · Favourite Channel Code Shift
- Dimensions: 235(H) x 51(W) x 33(D)mm





SCREEN MAINTENANCE

Screen Cleaning Kit

Removes dust and fingerprints from LCD screens effectively without streaks, scratches or stains. The three sided cleaner has a soft microfibre cloth to prevent scratches, and the cleaning solution has a unique formula for an effective clean. The screen cleaner and cleaning solution pack away for easy storage.

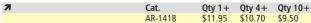
- Includes 25ml cleaning solution bottle
 Dimensions: 150(L) x 45(H) x 30(D)mm

7	Cat	Oh. 1 :	044	Ot. 10 :
<i>n</i>	Cal.			Qty 10+
	AR-1417	\$9.95	\$8.75	\$7.75

LCD Screen Cleaning Kit

Keep your computer, TV and other LCD screens clean with this easy to use kit. Remove dust and fingerprints without streaking, scratching or staining. The special solution removes those greasy fingerprints and the elastic anti-static brush and scratch free microfibre cloth are excellent for eliminating dust and grime.

- Elastic anti-static Brush
- Drip-free cleaning solution
- Special microfibre material which is capable of preventing panel scratch and will not harm LCD protective coating.









AV Senders are a convenient way to transmit audio and video signals across the home, office or building without the need to run wires. Recent technological advances in digital transmission has also improved the quality of the signal transmitted, ensuring a clean, uninterrupted signal.

Our models also include built-in infrared extenders so the channel or volume can be changed as if you were sitting in front of the sender.

Choose the new HDMI model to send signals in high-definition to a large screen TV in another room. Great for watching videos from a Blu-Ray player, XBOX™, PS3™ or Pay TV in another room in HD.

2.4GHz DIGITAL Wireless AV Sender

Our newest 2.4GHz Wireless Audio Video System uses the cutting-edge design in wireless digital technology to send stereo audio and video around your home. Watch your favourite TV programs or listen to Hi-Fi quality stereo sound in anywhere of your home without the need to run extension cables. Also integrates an infra-red extender which allows control of the settings from the receivers end. Achieve up to 100 metres line of sight with the supplied antenna, or greater distances using a higher gain antenna (not included) with a SMA plug. A great new digital solution that provides crystal clear reception without interferences. Supplied with power adaptors.

- 2.4 GHz band, FHSS (Frequency Hopping Spreading Spectrum)
 Digital wireless technology to resist interference
- 128bit AES encryption to protect personal privacy
 IR extender function (also suitable for Foxtel® STB)
- IR range 30 to 57kHz
- Compatible PAL and NTSC format
- 2.4GHz DIGITAL Transmits distance up to 100m (clear line-of-sight)
- Dimensions: 170(W) x 130(D)x 43(H)mm





Qty 2+ Qty 1+

\$169.00 \$151.95



Exceptional performance and value for money continues to make this 5.8GHz wireless AV sender one of our most popular products. Now in its third generation with a more compact size, increased range, and an upgraded remote control extender with larger bandwidth to cover many pay TV controllers.



Shifting wireless transmissions to the 5.8GHz band allows you can avoid the interference from the ever increasing number of items using the 2.4GHz band. Examples of devices which can cause 2.4GHz interference include cordless phones, Bluetooth® devices, 802.11 wireless LAN systems, and even the humble microwave oven. This transmitter and receiver set allows you to beat the congestion and use the assured picture quality of a 5.8GHz system to provide hassle-free wireless sharing of AV signals all over your house, office, factory or shop.

Depending on conditions it is capable of transmitting composite video and stereo audio signals over distances up to 50m. Using the directional antennas you can steer the transmission to maximise performance, even sending the signal through walls and floors. With four user selectable channels you can even use multiple sets to send different signals within the one site, ideal for sending the pay TV to your entertainment area while you send the DVD signal to the rumpus room.

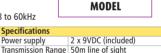


5.8GHz!

Also Available AR-1879 Additional 5.8GHz Wireless AV Receiver

- · Supplied as a transmitter and receiver pair
- Expandable to multiple TVs using additional receivers (sold separately)
 Directional antenna minimises multi-path interference
- IR remote control repeater circuit to operate source from receiver end Improved IR repeater suitable for controllers with carrier frequencies from 38 to 60kHz
- Includes IR output lead to direct remote control signals to required device
- · Supports PAL and NTSC signals

Cat.	Qty 1+	Qty 2+	Qty 4+
AR-1878	\$99.00	\$88.95	\$78.95

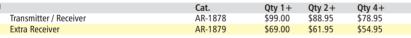


Dimensions

NEWLY IMPROVED

150(L) x 112(W) x 110(H)mm

(with antenna up)



5.8GHz DIGITAL HDMI Sender/Receiver

Transmit real time 1080p HDMI signal without any video loss or compression to a flat panel TV in another room. It uses the WHDI standard for transmitting uncompressed HDMI signals wirelessly to a receiver in any room up to 25m away. The unit is able to transmit to up to four receivers, however will only display to one transmitter at any given time. An IR receiver can be plugged into the sender unit so you can use any remote control to operate the source from the receiving end. Setup is truly plug and play, you will be up and running in a matter of minutes.

the receiving end. Setup is	truly plug and play, you will be up and rulling if
Specifications	
Operating frequency	5.8GHz
Video input resolution	1080p, 1080i, 720p, 576p, 576i, 480i
Audio format support	Up to 10Mbps, up to 192kHz x 24bit AC-3 and DTS
Infra-red Carrier Frequency	38KHz
IR Frequency	38kHz
Data transmission rate	3Gbps
RF Power	38kHz
Latency	< 1ms
Power consumption	6-7W
Receiver/Sender dimensions	154(H) x 92(W) x 20(D)mm

TECH TIP **DIGITAL Technology** 5.8GHz

Add-ons available separately

- Extra receiver see AR-1876
- 4 input HDMI switcher designed to plug directly into the transmitter see AR-1874







4 INPUT HDMI SWITCHER FOR AR-1877

To be coupled with our 5.8GHz Wireless HDMI Sender/Receiver (AR-1877) to allow up to 4 HDMI sources to be connected to the wireless transmitter and switched between. It docks horizontally onto the transmitter and is powered directly from it. Also supplied with 4 infra-red emitters to control up to 4 HDMI devices.

Dimensions: 154(H) x 55(W) x 20(D)mm

7		Cat.	Qty 1+	Qty 2+	Qty 4+
HDMI Transmitter/	Receiver	AR-1877	\$249.00	\$225.00	
Extra Receiver		AR-1876	\$149.00	\$133.95	\$118.95
4 Input HDMI Swit	cher to suit AR-1877	AR-1874	\$49.95	\$44.90	\$39.90

Freecall order hotline: 1800 022 888



UHF/VHF ANTENNAS

UHF TV Antennas Band 4 & 5

Receive Bands 4 & 5 (channels 21-69)

These UHF TV antennas are extremely well priced when compared to similar products on the market, but don't let the price fool you – they still have excellent performance on both analogue and digital TV signals.

The two models shown boast an X-Type element design for wider bandwidth and higher gain, in two different sizes to cover a wide range of reception areas.

They feature a waterproof F-type PCB balun, water resistant elements, boom and reflectors made of metal, not plastic. Antennas are supplied in robust, easy to carry retail packaging and are very easy to assemble.

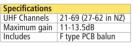
UHF Phased Array TV Antenna

This wideband phased array antenna suits analogue or digital TV and is ideal for country poor reception areas, where you have ghosting problems or are not in direct line of sight of the transmitter. (Gold Coast, Wollongong, Central Coast, Newcastle for example)

- Band: 4 & 5
- Can be used for horizontal or vertical polarisation
- Dimensions: 610(W) x 890(H)mm
- Digital TV ready

*Not suitable for all areas.







91 FLEMENT

Huge antenna suitable for deep fringe signal reception.

- Flements 91
- Gain 15 19dB
- Channels 21 to 69 Bands 4 & 5
- Freq. 470 to 862MHz
- Boom Width 20mm sq
- Overall Length 2214mm.





Suitable for medium signal reception areas.

- Elements 43
- Gain 13dB
- Channels 21 to 69 Bands 4 & 5
- Frequency 470 to 862MHz
- Boom Width 20mm sq
 Overall Length 1234mm



	READY for digital TV				
7	Cat.	Qty 1+	Qty 2+	Qty 5+	
	IT-3181	\$44.95	\$40.45	\$35.90	

Log-Periodic 32 Element VHF/UHF TV Antenna

Specifically designed with digital TV in mind, this combination VHF/UHF log periodic antenna picks up all the frequencies where digital TV is transmitted. The VHF band 3 elements fold in for compact packaging, are 7mm thick and made of heavy duty materials to minimise damage from our pesky Australian birdlife.
Receiving only VHF band 3 (channels 6-12) and UHF bands 4 & 5 (channels 28-69) means doing away with those dastardly long elements which are only for picking up ABC analogue, the same ones that cockatoos love to sit on and destroy. All the plastics are UV stabilised and the balun has an F-type output for connection to your coax down lead. While not quite as strong as our Australian- made Digimatch antennas, this antenna offers similar performance in a cost effective, relatively compact package for receiving all your free to air digital TV channels with just one antenna. Comes packed in a compact box to reduce postage costs, and includes mounting clamp and twist-on F connector with rubber boot.





7	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3138	\$69.95	\$62.95	\$55.95

Combination VHF/UHF DigiMatch Antenna

These Australian made heavy duty antennas are the ideal metropolitan antennas for Digital TV as they are capable of receiving digital and analogue TV on VHF channels 6-12 and UHF channels 21-69. The UHF section of the antenna employs X-type elements for wider bandwidth and higher gain, whilst the VHF section has elements made from high grade aluminium strong enough to withstand damage from birds. The VHF section of these antennas can be mounted horizontally or vertically for areas such as Canberra and Shepparton, making them suitable for all TV transmitters throughout Australia. Their overall design has improved figures for gain, VSWR and F/B ratio to give a superior carrier to noise ratio - this means more signal, less noise and therefore much lower chance of picture dropouts.

NOT AVAILABLE IN NEW ZEALAND

The Digital anti-reflection Matching System (DMS) employs a diplexer to electronically couple the VHF and UHF sections of the antenna together, giving 20dB isolation to achieve a better Bit Error Ratio (BER) and maximum digital performance.

- Ready for today and future UHF allocations and Plus One networks
- F-Type PCB balun & diplexer for quick installation and improved VSWR
 Black ABS UV resistant plastics
- 12.7mm dia. VHF elements
- Stainless steel screws
- · Australian designed and manufactured
- Powder coated boom (blue)

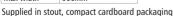


\$63.95

DIGIMATCH VHF/UHF X-TYPE COLINEAR 27 ELEMEN

Receives Band 3, 4, and 5 (Channel 6-12 and 21-69)

Specifications	
Elements	27
Gain	VHF 7dB, UHF 11dB
Avg. VSWR	1.9:1
Avg. F/B Ratio	VHF 12dB, UHF 18dB
Boom length	1320mm
Max width	900mm





Cat. Qty 2+ Qty 5+ LT-3195 \$149.00 \$133.95 \$118.95

DIGIMATCH VHF/UHF X-TYPE COLINEAR 16 ELEMEN

Receives Band 3, 4, and 5 (Channel 6-12 and 21-69)

Specifications	
Elements	16
Gain	VHF 4.5dB, UHF 6dB
Avg. VSWR	VHF 2.4:1, UHF 2.9:1
Avg. F/B Ratio	VHF 10dB, UHF 12dB
Boom length	860mm
Max width	900mm





Cat Qty 5+ LT-3190 \$99.95 \$89.95 \$79.95

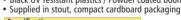
DIGIMATCH VHF/UHF ECONOMY 7 ELEMENT

\$79.95

\$71.95

Receives Band 3, 4, and 5 (Channel 6-12 and 21-69). Perfect for caravans or space-conscious metropolitan areas. Designed to enable positions in all horizontal, vertical or horiz/vert. polarities

- Suitable for all transmitters across Australia
- High performance / Heavy duty construction Stainless steel connection screws
- Black UV resistant plastics / Powder coated boom





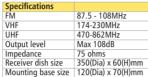
DIGITAL ANTENNAS - OUTDOOR (CONTINUED)

Outdoor Omni-Directional UHF/VHF Amplified Digital Antenna

With inbuilt low noise and high gain booster, this compact and weather resistant outdoor digital antenna is ideally suited for caravans, boats, and other fixed or mobile applications where space is constrained or harsh environmental conditions require a little extra durability. Excellent wide frequency reception for local free-to-air analogue and digital TV, DAB+ digital radio as well as FM radio transmissions. It can be either base mounted or mast mounted and includes mounting bracket, 12V mains power adaptor and a 12V in-car charger.



• SMD technology • Anti-rust and UV protected



	_		(,	- (,
7	Cat.	Qty 1+ 0	ty 2+ Qt	y 5+
	IT-3141	\$89.95	80.95 \$7	1.95

Outdoor UHF/VHF/Marine TV Antenna

Digital ready. It rotates. Ideal for "grey nomads". This unit is ideal for the traveller. Because you could be in any part of Aust/NZ this antenna works on all frequencies. (Some better than others, we admit). It covers VHF low, down to 45MHz (channel 2) to 860MHz (channel 69)

It includes a signal amplifier (240VAC adaptor supplied) AND a rotator motor built into the antenna housing AND a remote control for that. It also comes with approx. 8 metres of TV lead with a weatherproof plug on one end.



Antenna measures: 750(W) (deployed) x 30(L) x 100(D) (mm) (Folds down for storage)

71	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3143	\$59.95	\$53.95	\$47.90

BUYING A DIGITAL READY ANTENNA?

What else will you need? We carry a comprehensive range of masthead and other amplifiers, antenna hardware, attenuators, baluns and modulators. Come into one of our Jaycar stores or stockists and ask our friendly staff.



Telescopic Antenna Mast

With adjustable height and durable aluminium construction, this versatile telescopic antenna mast is suitable for just about any domestic application as well as marine and mobile use. It has a maximum height of 4.5 metres and includes a base mount and three guy wires for ensured stability.

- Suitable for multiple antenna use
- Easy installation and height adjustment 36mm diameter



IT-3202



\$47.90

Caravan/RV (General Purpose) Mast

We have had many requests and finally found one. This unit in natural finish anodised aluminium is a telescopic mast suitable for TV and other antennas. It will extend to 1.5 metres in 3 sections. The top section is 27mm dia. which is compatible with almost all TV antenna mounting hardware. The bottom section is 35mm dia. which would easily be accommodated by U-bolt or other clamping hardware (not supplied).

The top section has a sturdy cap and features a slot which enables you to neatly thread the coax lead down through the mast.

· Length extended: 610mm





Flat RF Cable with F Connector Sockets

Flat RF cable joining section that goes through closed windows and doors while allowing you to keep the window or door locked. Ideal for temporary antenna installations or tenants who want to fit a TV antenna without boring holes in the wall. Terminated to F-sockets either end.

· Length 200mm.



7	Cat.	Qty 1+	Qty 2+	Qty 5+
	WV-7399	\$4.95	\$4.45	\$3.90

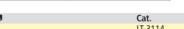
IT-3204

INDOOR ANTENNAS

UHF/VHF Passive Indoor TV Antenna

Ideal for areas with good indoor TV signal this passive indoor antenna picks up TV signals without needing to be connected to power. Features both a UHF loop and extendable VHF rabbit ears mounted on a weighted plastic base

Specifications	
Base and UHF Loop	190(H) x 120(W) x 84(D)mm
VHF Antenna Length	220-800mm
Cable Length	1.6m





Qty 2+ LT-3114

VHF/UHF Active Indoor Digital TV Antenna

A step up from conventional rabbit ears with 28dB variable gain. Suitable for VHF, UHF, FM and DTV reception

Mains plugpack included

	cations
VHF	54 - 239 MHz
UHF	470 - 821 MHz
Base	190(L) x 120(W)mm
7	,



Cat.	Qty 1+	Qty 2+	Qty 5+
LT-3133	\$44.95	\$40.45	\$35.90

STORE DETAILS

For store locations and opening hours see the back cover of this catalogue or download our "Store Locator App".



\$59.95

\$53.95

INDOOR ANTENNAS (CONTINUED)

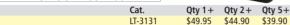
Indoor Flat Panel UHF/VHF Amplified Digital Antenna

Enjoy full Digital TV picture resolution from this sleek and attractive package Oozing style yet packing plenty of substance, this flat panel indoor amplified digital antenna features low noise circuitry, multidirectional reception and auto gain control - receiving both local free-to-air analogue and digital TV as well as DAB + digital radio signals with remarkable consistency and crystal clear clarity. Includes 6V 100mA mains adaptor and PAL

to F coaxial cable. Mount it either freestanding, on your wall or even on your ceiling in either vertical or horizontal position. Its shiny piano black finish will nicely complement your flat panel LCD or plasma TV.

• USB Powered

OSD I OWEICO		
Specifications		
VHF	160-230MHz	
UHF	470-860MHz	TO DE
Polarisation	Multi directional	WARRANTY
Output level	Max 96dB	
Impedance	75 ohms	
Panel size	227(W) x 235(H) x 14(D)mm	



Hi-Gain Indoor Digital VHF/UHF TV **Antenna & Amplifier**

This indoor Digital TV antenna includes an amplifier with variable gain up to 36dB. The amplifier is fitted with a 1.5m long TV-Out cable that is terminated with a male 'F' connector. The unit operates from a 12 volt mains adaptor that is included.

- 12 volt plug pack included
- Dimensions: approx 180(W) x 180(D)mm

Specifications	
VHF band	45-239 MHz
UHF band	470-860 MHz
VHF gain	30dB
UHF gain	36dB
Dipole length	1.12m

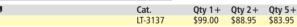
, J				
7	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3134	\$59.95	\$53.95	\$47.90

Digital Indoor/Outdoor Antenna

As global television moves from analogue As global elevision moves in final analication to digital, this indoor/outdoor digital antenna will be a great investment to your household. With its contemporary style design it may provide you with the high quality clear reception needed. The panel can mounted to the wall; great for minimising space. AC adaptor included



Specifications	
Frequency range	VHF - 174-230MHz, UHF - 470-862MHz
Antenna gain	10dB
Total gain	40dB
Impedance	75 ohm
Output	F female connector
Dimensions	502(L) x 235(W) x 76(H)mm
4	Cat



AM / FM ANTENNAS

Indoor AM Antenna

Stereo tuners aren't made with internal antennas. Most people listen to FM with their tuner, but for the rest who want AM, we have the answer - a loop antenna that can be easily left on top of your stereo cabinet of stored out of sight. It has built-in stand and fly leads to fit the antenna spring terminals on most tuners.

Specifications	
Frequency range	520 - 1660kHz
Dimensions	120(W) x 120(H)mm

71	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3001	\$19.95	\$17.70	\$15.70

FM Indoor Antenna

Simple ribbon type antenna (dipole) gives good performance in strong signal areas.

*50052 termination.	7			
7	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3002	\$3.95	\$3.45	\$3.15

WHAT YOU NEED TO KNOW ABOUT INDOOR ANTENNAS?

We get more indoor TV antennas back than other products. People complain that they "don't work" or the reception is inadequate.

Whether you get your money back from us or buy another from someone else, you will indoubtedly get the same result from the next indoor antenna you buy.

- An indoor antenna is a particularly poor way of getting good TV reception. The ONLY thing going for them is convenience.
- · The TV signal in a room in a highrise or a house a long way from the TV transmitter is probably EXTREMELY LOW
- You can get lucky. Sometimes an indoor antenna will work surprisingly well. This is just a pure FLUKE, lucky you.

 Jaycar's antennas have been tested and work as well (or better) than anyone

else's. We are the ONLY RETAILER in Australia who have staff who know at least something about these products. A sales assistant in other stores will say anything to make a sale (We do not normally criticise our competitors but we make an exception in this case.)

We strongly recommend that you try to use the outlet socket on the skirting board of a highrise or speak to someone in building maintenence about TV reception. If you are having problems it's likely other tenants are too. Best of all, get a proper antenna on the roof with the right components to deliver a clean signal to your TV set.

SIGNAL FINDERS

Satellite Finder with LED Display

Align your satellite dish quickly and accurately with this handheld satellite finder. Connected between the satellite dish and set top box the meter displays signal strength on the 6 LED display. Once the meter picks up a signal use the adjustable sensitivity to fine tune the angle and lock in on the signal. A small compass is included to help you get the dish pointed in the right direction. Perfect for



7	Cat.	Qty 1+	Qty 2+	Qty 5+
	LS-3302	\$24.95	\$22.35	\$19.70

Digital TV Signal Strength Meter

Take out the stress from installing your digital TV antenna by using this DVB-T signal strength meter. No more multiple trips up to your roof to get that perfect picture. Connect the pocket sized DVB-T signal strength meter and adjust the angle of your digital TV antenna, the easy to read LED indicator lets you know when you've hit the right spot. Adapters included.

- Requires 1 x 9V battery Frequency range: 40-862MHz Input Level: 50-90dBuV

7	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3332	\$39.95	\$35.90	\$31.90

TELEVISION AMPLIFIERS

Indoor TV Amplifier/Splitters

Boost your TV signal indoors. The antenna lead is plugged into the amplifier, and there are two outputs for two TVs, both which have a 12dB boost. One outlet can be used for FM stereo if desired. - Runs on 240VAC mains, and includes a LED power indicator.

Kingray

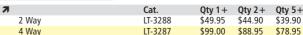
4 WAY

This unit is an analogue and digital television splitter/amplifier for use in multiple receiver applications. The amplifier has F type input/output
connectors and features variable gain on the VHF band. The unit operates from 240VAC and is mounted in a white ABS housing with integral mounting lugs. Adaptors are included to suit Belling Lee installations

• Dimensions: 60(W) x 40(H) x 85(L)mm.

		. ,
Specifications		
Frequency range	40 - 860MHz	Kingray
Variable gain	0 - 6dB	
_	'	

		LIEF
Qty 1+	Qty 2+	Qty 5+
	Qty 1+	Qty 1+ Qty 2+



TELEVISION AMPLIFIERS (CONTINUED)

4 Way Hardwired Splitter

Essential for operating more than one set from a single antenna - don't try wiring them without one - it doesn't work very well



Screw terminals

71	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3012	\$8.95	\$7.95	\$6.95

MASTHEAD AMPLIFIERS FOR DIGITAL TV

We have been selling "Kingray" brand Australiana owned products for many many years now. This year we have added a combined Masthead amplifier/splitter. We also sell the "Digimatch" products from another Australian owned company, Matchmaster. We get an almost zero return rate on these products. Why?

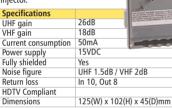
Because both companies sell most of their products to professional installers. The pro's know what they need, and one of those things they don't need is a callback due to a faulty installation. No profit in that!

It's hard work going back up the mast to rectify a problem, avoid this with products that the pro's use.

UHF/VHF Digital TV Masthead Amplifier

A cost effective 26dB masthead amplifier suitable for digital, analogue, or HDTV reception. The unit is able to accept signals from separate UHF and VHF antennas, or UHF/VHF combination antennas, and output the amplified signal down a single cable. Features separate VHF and UHF gain controls, F-type connections, weatherproof plastic housing and optional FM trap. To ensure protection from possible electrical interference the internal PCB has

been fully shielded with a metal enclosure. Supplied with power injector.





1011530

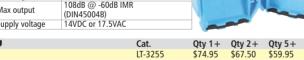


71	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3275	\$49.95	\$44.90	\$39.90

KMWD32FS 32dB Masthead Amplifier

- Wide input range to suit all analogue and digital TV signals
- · Higher amplification for installations with several TV outlets
- Combined or separate antenna inputs
- ower supply LT-3256 or LT-3258

- Neplacement power supply Li-3230 of Li-3230				
Specifications				
Frequency range	VHF 44-230MHz, UHF 520-820MHz			
Max gain	VHF 26dB, UHF 32dB			
Gain control	VHF 10dB, UHF 10dB			
Noise figure	VHF <3dB, UHF <2.5dB			
Max output	108dB @ -60dB IMR			
	(DIN45004B)			
Supply voltage	14VDC or 17.5VAC			



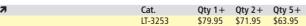
Kingray SAM224FS 4 Output Masthead Amplifier

Dustralian design and high quality SMD construction leads to exception performance from this 4-output masthead amplifier from Kingray. Accepts a single "mixed" antenna input, and provides four amplified outputs for you to run to each wall point in your home. All connections are F-type to ensure best signal quality, and the circuit board is housed in a metal case to shield against noise. Includes power supply.



- · Wide input range to suit all analogue and digital TV signals
- vvice input range to suit all analogue and digit
 4 individual amplified outputs
 Suitable for combined VHF/UHF antenna input
 Replacement power supply LT-3256
 Frequency range: 44 860 MHz
 Max gain: VHF 12 dB, UHF 16 dB
 Gain control: 11 14 dB sile

- Gain control: 11 14 dB tilt Noise figure: <3.5 dB
- Max output: 100 dBuV DIN45004B / -60dB IMR
- Supply voltage: 14V DC 70mA

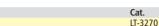


VHF/UHF/HDTV Masthead Amplifier - Digimatch

Designed in Australia specifically for harsh Australian conditions, this masthead amp is ideal for digital, analogue or HDTV reception in Australia or New Zealand. Suitable for use with either separate VHF and UHF antennas, or a single combination antenna. It also features separate adjustable gain on VHF and UHF for optimum signal. Supplied with full installation manual, mounting hardware and power supply. Waterproof housing and fully shielded.

- HDTV Compliant
- Heavy duty clamping system
 Suitable for bands 1-5

- Regulated power supply
 F-type
 Adjustable inter-stage gain on UHF & VHF
 UHF gain: 10 30dB / VHF gain: 5 25dB
- Fully shielded AC power adaptor with F-type connection included Dimensions: 112(W) x 108(H) x 35(D)mm





 Switchable input selection Posistor protected

• F-type connectors

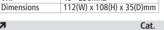
\$64.95 \$58.50 \$51.95

Digimatch UHF/VHF Diplexer with DC Bypass

If you want to install a VHF and a UHF antenna on the same cable. you'll need a diplexer. The design allows tilting for easy installation and the cable entry is sealed against the weather. Quality Matchmaster product suitable for Australia and New Zealand, supplied with heavy duty clamp.

- F connections for faster installations
- Fully screened for impulse noise reduction
- Weatherproof housing
 Suitable for Australia and New Zealand use
- · HDTV compliant

Specifications	
UHF	470 - 862MHz
VHF	45 - 230MHz
Dimensions	112(W) x 108(H) x 35(D)mm



Qty 2+ LT-3082

Replacement Power Supplies for Masthead Amplifiers

F-socket power injector.

• 14VDC@150mA - Cat LT-3256 • 17.5VAC@100mA - Cat LT-3258





4







							-	
7	Voltage	Current	Connection	Cat.	Qty 1+	Qty 2+	Qty 5+	
	17.5VAC	100mA	F-59	LT-3258	\$23.95	\$21.35	\$18.95	
	14VDC	150mA	F-59	IT-3256	\$23.95	\$21.35	\$18.95	

DID YOU KNOW...

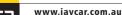
Samuel Morse (1888 - 1946)

The invention of telegraph was the beginning of an era, of faster and better developed means of communication. It laid the foundation for a series of developments which led

to a revolution in human communication. Telegraphy is the root of all the advanced communication methods which most of us are almost 'addicted' to. The telegraph was invented by Samuel F.B. Morse, who transmitted the first electrical message "What has God wrought?". This message was conveyed from Washington to Baltimore on May 24, 1844. But the story of the telegraph dates back in time, to as far as the 1500s, when a few contemporary thinkers had thought of using light or electric impulses as the means of communication. Several centuries later the first telegraph system made use of Morse Code, which was later accepted as a global standard for deciphering text.







ATTENUATORS

Fixed Attenuators

Fixed attenuators are a handy way to resolve ghosting and reflections caused by too high a signal strength in RF or Video signals. BNC or F-Type fixed attenuators will address these problems.

- Made from solid brass body with nickel plating
 Bandwidth: 5MHz to 1GHz
- All are inline (male to female) and DC Blocking (DC Blocking Module also available - LT-3070)



4	7	Atten.	Cat.	Qty 1+	Qty 2+	Qty 5+
	BNC	3dB	LT-3053	\$9.95	\$8.75	\$7.75
	BNC	6dB	LT-3055	\$9.95	\$8.75	\$7.75
	BNC	12dB	LT-3057	\$9.95	\$8.75	\$7.75
	F Type	3dB	LT-3052	\$9.95	\$8.75	\$7.75
	F Type	6dB	LT-3054	\$9.95	\$8.75	\$7.75
	F Type	12dB	LT-3056	\$9.95	\$8.75	\$7.75
	DC Block	king				
	Module	-	LT-3070	\$19.95	\$17.70	\$15.70

Variable Attenuator

May reduce ghosting in some cases. In certain situations you can actually receive too much TV signal. This attenuator (signal reducer) plugs in line and has a variable control. Supplied with two F sockets, maximum attenuation is 20dB



WITH **F SOCKETS**

7	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3050	\$12.50	\$10.95	\$9.95

Kingray VHF/UHF **Distribution Amplifier**

Suitable for analogue and digital free-to-air TV reception, this distribution amplifier is suitable for MATV applications. Housed in a stout, fully shielded die-cast aluminium case, it features single or combined VHF/UHF inputs, separate VHF/UHF gain controls and -30dB test point. It's designed for indoor use, but may be used outdoors with the manufacturer's recommended weatherproof masthead housing. Mounting bracket and 12V plug pack included, or the unit may be line-powered via the coax cable. RF output is by F-type connectors

Specifications	
Frequency range	44 - 230/520 - 860MHz
Gain	27dB - 32dB
Noise	5dB
Return loss	>10dB
Current consumption	140mA
Dimensions	85(L) x 81(W) x 27(H)mm





RF MODULATORS

RF Modulator for Audio Video

This modulator converts a video and audio signal to an RF antenna type signal to connect directly into a TV which has a PAL RF socket.

- Channel 0 and 1
- Requires 12VDC @ 100mA
- Use our plugpack MP-3147Suitable stereo for Home Theatre

7	Cat.	Qty 1+	Qty 2+	Qty 5+
Stereo	LM-3873	\$24.95	\$22.35	\$20.95

Audio Video RF Modulator with Display

Older TVs don't have an audio/video input which makes them pretty useless for watching DVDs or playing back your

Camcorder or digital camera images. This handy device overcomes this problem and lets you press an older TV back into useful service. The modulator takes the AV output from your DVD etc, and converts it into to a standard UHF TV channel frequency for connection to the TVs antenna input. The TV channel is selectable and is displayed on the modulator's front panel. The modulator is supplied with a 750mm stereo/mono adaptor cable and plug pack power supply.

7	Cat.	Qty 1+	Qty 2+	Qty 4+
	LM-3878	\$59.95	\$53.95	\$47.90

AV/RF Modulator - Stereo

Many older TVs don't have AV inputs making connection of modern AV sources a nogo. You can alleviate that



problem with this nifty RF modulator: it takes a composite video or S-video AV signal and converts it into an RF signal down the antenna line so that your TV just an Kr. signal down the antenna line so that your I y just tunes into the signal as if it were a broadcast TV station. Also very handy for piping AV signals around the home on existing TV antenna cabling, allowing you to view an AV source in multiple rooms around the house without the need to lay new cabling. You can even select which channel to modulate the AV signal into, to avoid interference with any existing signals on your TV extensi interference with any existing signals on your TV antenna line. Modulates

signals into the UHF range



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	LM-3879	\$74.95	\$67.50	\$59.95

BALUNS

Outdoor Baluns

Essential for matching 300 $\!\Omega$ antennas, TVs and ribbon with 75 Ω coaxial and TV connections

ANTENNA MOUNT -**75 OHM**

Mounts on TV antenna, Used to connect 75 Ω coax to TV aerial that does not already have a balun. Simple screw terminal connections. Weatherproof and long lasting.



7	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3026	\$4.95	\$4.45	\$3.90

300 OHM TO 75 OHM - 'F' TYPE

Mounts on antenna Converts natural 300Ω impedance of an antenna to 75Ω fo coax. 'F' type



7	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3028	\$4.95	\$4.45	\$3.90

Indoor Baluns

75 OHM TO 300 OHM

75 Ω socket for input and 300 Ω ribbon cable output. Allows connection of any 75Ω output (video, TV games etc) to a TV with an older style 300Ω input.

7	Cat.	Qty 1+	Qty 2+	Qty 5+	
	LT-3022	\$4.50	\$3.95	\$3.60	

ANTENNA HARDWARE

VERTICAL STANDOFF BOOM FOR

DUAL POLARITY ANTENNAThis is attached to a mast section to allow dual polarity antenna to be mounted vertically which is required in some areas. It reduces interference between the VHF elements & the



BARGEBOARD ANTENNA MOUNT

Simply bolts onto bargeboard (below gutter) or other support. 1800mm long, galvanised steel construction.

Mounting plate: 220 x 70mm

LT-3200



LT-3220 590mm no U-bolt

LT-3220

MAST SECTION

2.4 metres long galvanised steel mast.

IT-3230

U-CLAMP/V-BLOCK

For securely clamping mast sections, mounts etc., at right angles





7	Cat.	Qty 1+	Qty 4+	Qty 10+
	LT-3149	\$15.95	\$14.35	\$12.70
	LT-3200	\$27.95	\$24.95	\$22.35
	LT-3212	\$19.95	\$17.70	\$15.70
	LT-3220	\$19.95	\$17.70	\$15.70
	LT-3230	\$29.95	\$26.90	\$23.70
	LT-3235	\$4.50	\$3.95	\$3.60

Installing Your Own TV Antenna Booklet

Antennas play an important part in achieving the best for fringe area reception. This guide explains antenna

basics and how to install them. Once you understand the basics you will be able to improve your reception and avoid common pitfalls. The guide includes information on current analogue frequencies and the new digital channels





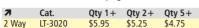
7	Cat.	Qty 1+
	BI-8210	\$2.00

SPLITTERS

Indoor Splitter - 2 Way

Allows you to connect two TV, video, games, FM receivers etc to one RF plug, so you can run multiple devices on one outlet.





F Connector Die Cast Metal Case TV Splitters

These splitters are sealed in a metal case with a mounting bracket. They are suitable from 5 - 900MHz, VHF, UHF TV and FM radio.

- Requires F type plugs see plugs and sockets section
- Supplied with mounting screws

They have power pass for masthead amps on all ports. Low VSWR (Voltage Standing Wave Ratio).



Single Power Pass

These have power pass on the input to one output. This is to allow voltage up through the splitter to power a masthead amplifier or satellite dish LNA. These allow the voltage on one port only, so if anything goes wrong, all ports are not affected by low frequency shorts.



TECH TIP
Low VSWR for Digital Performance
Digital Periorillance

	D	IG	IT/	AL AD	Y
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7	Cat.	Qty 1+	Qty 2+	Qty 5+
2 Way	LT-3046	\$12.95	\$11.35	\$10.35
4 Way	LT-3047	\$17.95	\$15.95	\$14.35

DC Blocking Module

DC Blocking modules stop the DC voltages from powered RF amplifiers travelling into TV sets or other devices. It is a low cost protection against voltages which can damage expensive TV sets or equipment.

Made from a solid brass body with nickel plating.

- Bandwidth: 5MHz to 1GHz.
 22-gauge spring steel centre pin.
 Inline design (socket to plug).

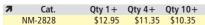
7	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3070	\$19.95	\$17.70	\$15.70

Coax Seal Tape

This versatile material looks like ordinary PVC electrical tape but is actually a handy sealing system that fuses together to form a removable, waterproof seal once it has been applied. The tape has many uses such as waterproofing outdoor coax connections, sealing low pressure vacuum lines, or even as an alternative to heat shrink tubing

when access is difficult.

• 12mm wide x 1.5m long.



WALL PLATES & ACCESSORIES

Large Blank Wallplate

This is a standard power point size white blank

wallplate. Size 72 x 115mm. Ideal for many uses, including mounting TV antenna sockets, audio sockets speaker terminals, low voltage outlets etc, etc.



7	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3035	\$4.95	\$4.45	\$3.90

Flushmount 75 Ohm Wall Socket

Standard power point size

- PAL socket.
- 71(W) x 115(H)mm.



7	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3025	\$6.50	\$5.75	\$4.95

Flushmount Wall Socket TV / FM Splitter

Standard power point size. Has two PAL sockets, one for TV and one for FM. Simply run one cable in from

71(W) x 115(H)mm. • Includes built-in splitter



7	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3032	\$9.95	\$8.75	\$7.75

Wall Plate - Mini

Architrave type standard white wall plate with a cutout for the 75 Ω snapin insert shown below.



7	Cat.	Qty 1+	Qty 2+	Qty 5+	
	LT-3030	\$2.95	\$2.60	\$2.30	

Flushmount 75 Ohm TV Wall Socket with F59 Connection

- Standard power point size.
- PAL socket output
- F59 connection at rear
- Mounting screws
- Dimensions: 71(W) x 115(H)mm

7	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3065	\$6.50	\$5.75	\$4.95

PAL 2 Socket Wallplate - TV & FM

Standard power point size. Has two PAL sockets, one for TV and one for

FM. Simply run one cable in from antenna.

- F59 rear connection
- · Mounting screws included
- Dimensions: 115(H) x 71(W)mm

7	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3066	\$9.95	\$8.75	\$7.75

Metal Mounting Brackets for Large Wallplates

Suitable for plasterboard walls



7	Cat.	Qty 1+	Qty 2+	Qty 5+	
	LT-3033	\$2.95	\$2.60	\$2.30	

Recessed Cable Entry Wall Plates

Create a neat cable entry/exit point for terminated or non-terminated audio and video leads. The wallplate design allows cables to be passed through walls with minimal fuss and the inner curved recessed design ensures maximum safety. Mounting screws



• Screw thread size: 2.5mm

included.

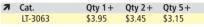
- Small: 124(W) x 82(H) x 36(D)mm Large: 124(W) x 82(H) x 55(D)mm

7		Cat.	Qty 1+	Qty 5+	Qty 10+
	Small	PS-0295	\$6.95	\$6.25	\$5.50
	Large	PS-0297	\$6.95	\$6.25	\$5.50

75 Ohm TV Floor Socket with F59 Connection

Designed to mount on the skirting board or floor

- 75 ohm impedance (standard).
- PAL socket output
- F59 connection at rear
- Mounting screws
- Dimensions: 50(L) x 30(W) x 25(H)mm



TV Floor Socket

Designed to on the skirting board or floor



• 75 ohm impedance (standard).

7	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3023	\$3.95	\$3.45	\$3.15

F61 Coax Floor Entry

White in colour.

- Size 58 x 46(base) x 27(H)mm.
- Accepts F59 plug both sides of this fitting.



LT-3042

75 Ohm Insert

Clips into the mini wallplate shown above.



7	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3031	\$3.50	\$3.15	\$2.75

F61 Flushmount Wall Socket

Standard power point size.

- Accepts F59 plug both sides of this fitting.

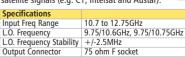




Satellite KU-Band Universal Single LNBF



LNBF for satellite installations. Suitable for receiving all single and dual polarised Ku-band satellite signals (e.g. C1, Intelsat and Austar).



7	Cat.	Qty 1+	Qty 2+	Qty 5+
	LS-3320	\$49.95	\$44.90	\$39.90

Ceiling Speakers

IN-CEILING & WALL MOUNT SPEAKERS

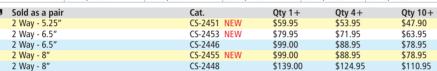
In-Ceiling 2 Way Speakers

These ceiling speakers are a 2 way speaker design giving excellent audio quality compared to traditional PA speakers. Combining a coaxial woofer with dome tweeter they are available in three sizes to cover a variety of domestic and commercial applications. Two of the models also have adjustable tweeter mounts making them ideal when used in a home theatre setup by allowing you to direct high frequencies towards the centre of a room. The flush mount design and fold out retaining clamps allow them to be easily installed in new or existing ceilings, and the matte white finish blends in with most ceiling colours.

- Sold as a pair
- 8 ohm impedance



	CS-2451	CS-2453	CS-2446	CS-2455	CS-2448
Woofer	5.25" polymer cone	6.5" polymer cone	6.5" polymer cone	8" polymer cone	8" polymer cone
Tweeter	25mm silk dome	25mm silk dome	25mm polymer dome		25mm polymer dome
Tweeter mount	Fixed	Swivel	Fixed	Swivel	Fixed
Rated Power	25WRMS	30WRMS	30WRMS	40WRMS	50WRMS
Frequency Range	200Hz - 18kHz	180Hz - 18kHz	180Hz - 18kHz	120Hz - 18kHz	120Hz - 18kHz
Sensitivity	87dB	88dB	87dB	90dB	87dB
Minimum	6mm	8mm	8mm	10mm	8mm
mounting thickness					
Dimensions	A 200, B N/A,	A 230, B N/A,	A 204, B N/A,	A 260, B N/A,	A 246, B N/A,
Dilliensions	C 170, D 60 mm	C 198, D 85mm	C 180, D 75mm	C 228, D 85mm	C 220, D 90mm







In-Ceiling 2 Way 6.5" Speaker with Stereo Tweeter

Yes, you read it right. This 2-way ceiling speaker is actually a stereo speaker. Well, it might not be like your usual Hi-Fi speakers, but there are left and right channel inputs. The design is actually quite interesting. The woofer is a dual voice coil design, and a left and right channel signal is each run into one of those coils. Thanks to a crossover cap on the inputs, each tweeter is also fed its corresponding signal to complete the stereo sound. There may not be a huge amount of stereo separation apparent in the audio, but it still sounds far better than a standard mono signal that is commonly used in this situation. It is a

Specifications	
Impedance	8 ohms
Power handling	40WRMS (75W Max)
Frequency range	180Hz - 18kHz
Sensitivity	84dB
Mounting depth	91mm
Dimensions	A 250 B N/A
Dimensions	C 210 D 95mm



great speaker, made w	ith high quality compo	nents.		C 210 D 95mm	шаввапти	RELATED PRODUCT
7		Cat.	Qty 1+	Qty 4+	Qty 10+	See our Horn Speaker &
2 Way - 6.5"	Each	CS-2445	\$79.95	\$71.95	\$63.95	Tweeters on page 262

Ceiling Speaker Grilles

These plastic speaker grilles are designed to neatly cover ceiling mounted speakers. Suitable for use with many common 4" or 8" speakers including our CE-2325 8" twincone PA speaker. Can also be used to cover holes in panels or conceal items such as cameras or microphones.

- · White in colour
- Sold individually
- Mounting screws not included

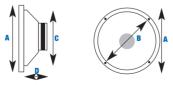
4" CEILING SPEAKER GRILLE

- Suitable for 4" speakers
- · Screw holes align with speaker screw holes
- Screw hole spacing: 116mm
- Dimensions:130(Dia) x 14.5(H)mm

8" CEILING SPEAKER GRILLE

- Suitable for 8" speakers
- Integrated posts for mounting speakerScrew holes outside of speaker area
- Screw hole spacing: 233mm
- Dimensions: 250(Dia) x 11(H)mm

SPEAKER DIMENSIONS



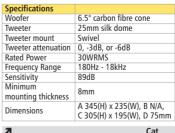
- From one side to the other
- **B** = Mounting holes diagonal C = Cut out in millimetres
- D = Depth

7		Cat.	Qty 1+	Qty 5+	Qty 10+
4"	Each	AX-3550	\$4.95	\$4.45	\$3.90
8"	Each	AX-3560	\$6.95	\$6.25	\$5.50

In-Wall 2 Way 6.5" Speaker with Swivel Tweeter

Designed for use when space is limited, this in-wall speaker panel mounts flush with the wall lining turning the cavity space into a speaker enclosure. Ideal for use in hallways or galleries where bracket mounted speakers get in the way, they are also great for use in a home theatre setup or entertainment area. Featuring a 2 way 12dB crossover for optimal sound quality, it also has adjustable tweeter mounting and tweeter attenuation switch to customise the speaker to your required application. Easy to fit using the fold out mounting while the white flush mount cover helps protect and conceal the installed

- · Sold individually
- · 8 ohm impedance



7			Cat.
	2 Way - 6.5"	Each	CS-2464





Qty 1+	Qty 4+	Qty 10+
\$59.95	\$53.95	\$47.90

ABS Indoor/Outdoor Speakers

Attractive in design, these 2 way speaker system are very versatile. Suitable for indoor and outdoor (covered areas) applications, they can be mounted to a wall or ceiling and can be rotated 180 degrees for perfect sound projection. Each has a polypropylene woofer and dome tweeter. Ideal for conference rooms, auditoriums, lecture halls or out on the patio. Sold as a pair.



4" INDOOR/OUTDOOR SPEAKERS

Cat. CS-2475





5" INDOOR/OUTDOOR SPEAKERS

Cat. CS-2476





6.5" INDOOR/OUTDOOR SPEAKERS

Cat. CS-2477



8" INDOOR/OUTDOOR SPEAKERS Cat. CS-2478



7	Sold	as Pair	Cat.	Qty 1+	Qty 2+	Qty 10+
	4"	Indoor / Outdoor Speakers	CS-2475	\$69.95	\$62.95	\$55.95
	5"	Indoor / Outdoor Speakers	CS-2476	\$79.95	\$71.95	\$63.95
	6.5"	Indoor / Outdoor Speakers	CS-2477	\$99.00	\$88.95	\$78.95
	8"	Indoor / Outdoor Speakers	CS-2478	\$149.00	\$133.95	\$118.95

Freecall order hotline: 1800 022 888

Exciting New Rust Resistant Speaker Systems - IP55

Marine speakers nearly always corrode or rust. These ones won't! No metal grills, all plastic. Will work in any outdoor environment, of course. Best, however, to keep out of direct weather.



5" IP55 30WRMS - 2 WAY

This unit is completely moulded in high density UV resistant plastic. The only metal parts exposed are the mounting bracket and the speaker terminals.

• Speakers 5" woofer, 2" tweeter. Passive X-over

Specifications	CS-2479
Power Handling	30WRMS
Frequency Response	56Hz - 20kHz
Sensitivity	92 dB +/- 2dB (1w/metre)
Dimensions (mm)	215(W) x 155(H) x 115(D)

Cat CS-2479

6.5" IP55 40WRMS - 2 WAY

Identical to CS-2479 except larger with greater power handling capability.

• Speakers: 6.5" woofer, 2" tweeter. Passive X-over

Specifications	CS-2480
Power Handling	40WRMS
Frequency Respons	se 56Hz - 20kHz
Sensitivity	92 dB +/- 2dB (1w/metre)
Dimensions (mm)	265(W) x 195(H) x 145(D)

Cat CS-2480





LJE FIR	,
WHITE TO	

7	Sold as Pair	Cat.	Qty 1+	Qty 2+	Qty 10+
	5" Rust Resistant Speakers	CS-2479	\$149.00	\$133.95	\$118.95
	6.5" Rust Resistant Speakers	CS-2480	\$179.00	\$160.95	\$142.95

Active 5" Stereo Speakers with USB

The built-in amp provides 30WRMS per channel, which is more than enough for most uses. Input is either via line-level RCA or USB, so it will accept memory sticks or any other USB device. Add an MP3 player and you have a complete digital music system. It also has bass, treble, volume and MP3 track controls on the back panel. Perfect for your next patio party. Sold as a pair.

- USB or RCA input
- Mounting brackets includedBass and treble controls.





Specifications	CS-2437	
Power Output	30WRMS per channel	
Frequency Response	45Hz - 20kHz	
Nominal Impedance	4 ohms	
Dimensions	180(W) x 235(H) x 180(D)mm	

7	Sold as Pair		Cat.	Qty 1+	Qty 2+	Qty 10+
	5"	Pair	CS-2437	\$199.00	\$178.95	\$158.95

Home Theatre Speakers

White Active Column Speakers



These column speakers provide excellent directivity through the three 4" full range drivers installed. It has a built in amplifier and provides 20WRMS of power to each speaker unit. Also has RCA left and right inputs for external audio source connection. In a very strong and sturdy aluminium case, it is finished in glossy white paint finish.

- Great for schools, halls, churches, pubs and clubs.
- · Mains IEC leads are also included



Boosts sound from

Plasma TV not included

Specifications 20WRMS per speaker Power output Frequency response Signal to Noise Ratio 240VA 532(H) x 113(W) x 131(D)mm Dimension

etc where the standard Plasma TV speakers just won't cut it...

Ideal for Pubs, Clubs, Auditoriums

your Flat Screen TV Sold as a Pair

20WRMS per Speaker

Cat CS-2439 Qty 1+ \$299.00

Qty 1+

Qty 10+ Qty 4+ \$269.00 \$239.00

In-Ceiling 2 Way 6.5" Speaker in Can Housing

A 2 way ceiling mount speaker which gives excellent audio quality due to an integrated housing on the back of the speaker. Being housed in a sealed metal can improves low frequency response as well as protecting the speaker from dust, debris, and insects. The housing also ensures speaker performance is not affected by variations in the ceiling space making it suitable for locations with false or raked ceilings. Featuring a lightweight 6.5" honeycomb woofer and coaxial silk dome tweeter it can be flush mounted easily using the fold out retaining clamps or suspended in mid air using chain or cable attached to the housing brackets. A screw terminal cable entry is located on the back of the housing and a white clip on cover neatly conceals the speaker and mounting screws

- · Sold individually
- 8 ohm impedance

Specifications	
Woofer	6.5" honeycomb cone
Tweeter	25mm silk dome
Tweeter mount	Fixed
Rated Power	30WRMS
Frequency Range	110Hz - 18kHz
Sensitivity	89dB
Minimum mounting thickness	10mm
Dimensions	A 232, B N/A, C 210, D 190 mm





Qty 4+ Qty 10+

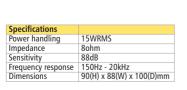


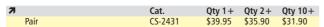


2.5" Indoor Lifestyle Cube Speakers

These cube speakers will blend with virtually any indoor setting and perfectly suit a home entertainment system or small PA setup. Surprising sound reproduction from the full range 2.5" speakers. Supplied with swivel brackets and mounting hardware suitable for wall or ceiling mount.

Sold as a pair





Active 12" 150W Subwoofer

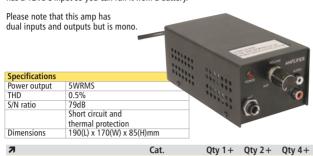
Add this high-performance powered subwoofer to your existing system and add some real kick to your home theatre system. The cabinet is finished in a timber vinyl veneer and houses a 12" driver and amplifier.

The amp is rated at 150WRMS and features auto power-on, level adjustment, crossover frequency adjustment, phase reversal switch, high and line level inputs as well as high and line level outputs. Line level connectors are gold plated RCA while high levels are via spring loaded clips.



5W Single Channel Amplifier

Sometimes you don't need gigawatts and multi channels. A versatile small audio amp for the workshop, test lab or as a small PA or busking amp. RCA and microphone inputs, dual speaker outputs. In addition to the mains input, it also has a 12VDC input so you can run it from a battery.



AA-0473

AMPLIFIERS - STEREO

18 Watt RMS Stereo PA Amplifier

This is a simple, fairly bullet-proof 18W per channel transistor amp and it's surprisingly loud! It is ideal as a small office or workshop PA amp in churches, community halls etc. It is protected from accidental speaker wiring shorts and if abused will simply shut down and reset after it has cooled off. It has a front panel microphone input, bass & treble controls as well as a master volume control.



\$29.95

\$26.90

\$23.70

A suitable microphone for this unit is AM-4190 on page 17.

Specifications	
Power	240VAC 50Hz 150mA
Output	18WRMS/Channel @ 49
Response	50-18kHz +3dB
Total Harmonic Distortion	0.08% @ 1W
S/N	106dB @ 15W
	94dB @ 1W
Operating Temperature	0-50°C
Microphone Input	600mV @ 47k
Dimensions	170 x 77 x 157mm





71	Cat.	Qty 1+	Qty 2+	Qty 4+
	AA-0472	\$49.95	\$44.90	\$39.90

2 x 15 Watt RMS Portable Stereo Amplifier

This compact amplifier can run off 8 x AA batteries making it ideal for street performers, or by the AC adaptor included for a hi-fi setup at home or in the office. It outputs a clean 15 watts RMS



per channel using a digital signal processor, and features spring-loaded push terminals for quick speaker wire termination and rear mounted 3.5mm stereo audio input. Includes a 1.8m coiled 3.5mm male-to-male cable for making connection to a PC, iPod®, MP3 player or portable CD player. Intelligent shortcircuit and over-temperature protection ensure amplifier longevity. A great little amplifier for some serious use!

 Batteries not included 	

Specifications	The same of the sa		1010			NINI
Power Output	2 x 15WRMS	(a)	•	0	1	100
Minimum Speaker Impedance	4 ohm		_		- 0	•
Frequency Response	60Hz - 20kHz					
Total Harmonic Distortion	< 0.04%		N	DTE!!!		_
Signal to Noise Ratio	>80dB			Batte	rv	
Dynamic Range	102 dB			owe		
Efficiency	88% (10W, 8 ohm)		15	owei	leu	
Channel Separation	>45dB					
Inputs	3.5mm Stereo					LJE
Dimensions	150(W) x 130(D) x 30(H)mn	ı				WARRA
7	Cat.	Otv 1	_	Otv 2		Otv 4

AA-0487

2 x 25 Watt RMS Compact Stereo Amplifier

A compact amplifier that can deliver up to 25WRMS of power per channel. It is ideal for home, office or a small workshop. Connect audio to the stereo RCA or 3.5mm line input, connect your speakers to the push down spring terminals, connect power and you're in business. There is also a 6.5mm microphone input on the front, making it ideal for a small office or workshop PA system.



 Controls include mic volume. music volume,

bass and treble 18VAC 2.2A power supply included.



Specifications	
Power output	2 x 25WRMS
Output impedance	4 to 8ohms
req response	5Hz to 65kHz, +/- 3dB
S/N Ratio	72dB
Dimensions	216(W) x 65(H) x 150(D)mm

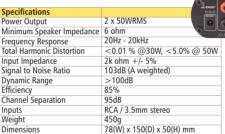


7	Cat.	Qty 1+	Qty 2+	Qty 4+
	AA-0486	\$99.95	\$89.95	\$79.95

2 x 50 Watt RMS Compact Stereo PA Amplifier

Uses digital sound processing to deliver the quality of a Class AB amplifier with the efficiency of a Class D. Features solid aluminium body, high current rated banana socket speaker terminals, stereo RCA audio input, front panel mounted 3.5mm stereo input and a 6.5mm headphone socket means it also doubles as a headphone amplifier. Rounded off with short circuit,

thermal and overload protection.
Package includes amplifier, 24VDC power supply, two sets of banana plugs, 3.5 to 6.5mm headphone adaptor, 3.5mm to 2 x RCA cable and coiled 3.5mm audio input cable.



7	Cat.	Qty 1+	Qty 2+	Qty 4+
	AA-0488	\$149.00	\$133.95	\$118.95

AMPLIFIERS - 8 CHANNEL

4 Zone Class D Amplifier

A simple to use 4 zone stereo amplifier capable of driving up to 8 speakers. Weighing in a total of half a kilo, the complete unit is cased in a steel housing with side brackets making it suitable for wall mounting. The compact size does not leave this amplifier short on features, all channels can drive speakers with up to 15WRMS, using digital signal processing and each zone has its own volume attenuator. An RCA stereo line input for connecting common sources such as Hi-Fi systems, DVD/Blu-Ray players, CD/MP3 players and radios. If 8 channels is not enough, add a line loop out expanding and creating an ideal system for schools, retails stores, shopping or even the office. This is the final piece of the puzzle when

installing or upgrading to a multi-zone PA or audio system. Requires 12VDC

9A power adaptor (MP32	.41).	1	And the second of	_/
Specifications			1	
Power Output	8 x 15WRMS		11 61	120
Minimum Impedance	4 ohm			
Frequency Response	20Hz-20kHz	RELATE	PRODUCT	
Total Harmonic Distortion	< 0.06%	See pa	ige 227, 40	5 for an 8
Signal to Noise Ratio	55dB	chann	nel headph	one amp
Dimensions	108(W) x 205(D) x 26(H)mm			
7	Cat.	Qty 1+	Qty 2+	Qty 4+
	AA-0469	\$129.00	\$115.95	\$102.95

\$49.95

\$44.90

\$39.90

25:

AMPLIFIERS - WIRELESS, SATELLITE

2 x 15WRMS Stereo 2.4GHz Digital Wireless Audio Amplifier System

Send crystal clear audio from your Hi-Fi or portable music device to speakers further away or outside, without messy wiring. Built upon the popular Class T amplifier design this system exhibits high-fidelity, tube-like audio that audiophiles have come to love and enjoy. Connect your speakers to the spring terminals and power using the included power supplies or by 8 x AA batteries in each unit (available separately). Supplied with 2 x 150mm 3.5mm curly cables to connect your audio source.

\$129.00



- 3.5mm local input for Smartphone or MP3 player connectivity
- Transmitter & Receiver requires 8 x AA batteries each

Specifications	
Power output	15WRMS x 2 (into 4 ohms)
Dynamic range	90dB
Sample rate	44.1kHz, 16-bit
Range	up to 20 metres line-of-sight
Frequency response	20Hz - 20kHz
Dimensions	156(L) x 45(H) x 95(W)mm



\$102.95



	AR-1895	

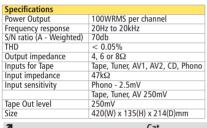
AMPLIFIERS - STEREO, HI-FI COMPONENT

2 x 100WRMS Stereo Amplifier with Remote Control

Cat

This is a good looking, no-nonsense stereo amplifier that will form the heart of an impressive stereo system. The amplifier is rated at a generous 100WRMS per channel and has a flat frequency response from 50Hz to 20kHz. Bass and treble controls are fitted providing +/- 10dB cut or boost. Equipped with microphone input level control, an infrared remote control and screw down speaker terminals to firmly secure the speaker cables.

\$115.95







7 Cat. Qty 1+ Qty 2+ Qty 4+ \$158.95 AA-0470 \$199.00 \$178.95

2 x 200WRMS Per Channel Stereo Amplifier

Based on the popularity of our AA0470 2 x 100 watt unit, but with higher power output (200WRMS) a USB MP3 player function in a standard Hi-Fi component size.

- Inputs: DVD/CD, aux 1&2, phono, tuner, tape, USB
- Speaker A+B stereo outputs
- · Full remote control

Specifications	
Power Output	200WRMS x 2 channels
Distortion	<0.003% (Vin=200mV 1W p.out)
Freq Resp	20Hz to 20kHz ± 1dB
S/N ratio	110dB digital input, 70dB analogue input
Channel separation	>80dB
Input impedance/sens.	47kohm/200mV
Bass/Treble	±10dB
Dimensions	430(W) x 241(D) x 114(H)mm
4	Cat Oty





Qty 1+ \$329.00 Qty 2+ Qty 4+ AA-0484

For Rack Enclosures

see page 308

RELATED PRODUCT

200W, 300W & 400W Rack Mount Amplifiers

Very versatile rack mount amps that suit a variety of applications. Add a small mixer and use them as a PA amp, or standalone as a foldback amp. They have unbalanced 1/4" jack inputs and balanced XLR inputs. Speaker connections are by Speakon connectors or screw binding posts. Very versatile amps that can be run as dual channel, stereo or bridged (AA-0477 & AA-0479 only - AA-0481 is a single channel). The build quality of these amps is excellent, with very solid aluminium chassis and front panels so they are a very costeffective solution for a pro audio application.

- Single channel or bridged
- Fan cooled
- Separate level controls for each channel
- Clipping and overload protection indicator LEDs
 2U rack mount / 3U subwoofer amplifier

Dual Channel Bridged 200W Rack Mount Amplifier AA-0477 Dual Channel Bridged 400W Rack Mount Amplifier Single Channel 300W Rack Mount Amplifier AA-0479 ΔΔ-0481



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	*					
7		Cat.	Qty 1+	Qty 2+	Qty 4+	
	200 Watt Amplifier Bridged	AA-0477	\$199.00	\$178.95	\$158.95	
	400 Watt Amplifier Bridged	AA-0479	\$299.00	\$269.00	\$239.00	
	300 Watt Amplifier	AA-0481	\$299.00	\$269.00	\$239.00	



Specifications	AA-0477	AA-0479	AA-0481
Power output	2 x 100WRMS @ 4 ohms	2 x 200WRMS @ 4 ohms	1 x 300WRMS @ 8 ohms
	1 x 200WRMS bridged @ 8 ohms	1 x 400WRMS bridged @ 8 ohms	
THD	<0.3% @ 1kHz 1W	<0.3% @ 1kHz 1W	< 0.17
S/N ratio	85dB	85dB	85dB
Input sensitivity	775mV, 1.0V, 1.4V	775mv, 1.0V, 1.4V	500mV
Short circuit protection voltage	3V	3V	3V
Dimensions	480(W) x 90(H) x 247(D)mm	480(W) x 90(H) x 247(D)mm	480(W) x 90(H) x 247(D)mm

JV60 6.5" 3 Way Speaker Kit

With the return of the Vifa drivers to our range, we are proud to re-introduce the ever popular JV60 speaker kit. This time around, we have spruced up the cabinet design to bring it in line with modern slender home theatre styling, but have otherwise kept the superb design untouched. We've also turned back the clock on inflation, and brought them in at a price well below what was

Let's wind the clock back almost 10 years and remember what was. By combining the excellent Let's wind the clock back almost 10 years and remember what was. By combining the excellent design and build of the Vifa components with some good ol' Aussie ingenuity, the JV60s offered a level of sound quality that punched well above their price weight compared to many imported European speakers of the time. Well, not much has changed since then. The JV60s still outperform plenty of well known European brands that still command inflated price tags often 4 times as much. Still today, it remains a sad fact that loudspeakers are often the "weak link" in an audio chain - perhaps due, in part, to their generally inflated commercial price tags. By investing a couple of hours of your own time to build this superb system to compliment most mid-powered amplifier/receivers, you can save hundreds, if not thousands, over commercial (and as mentioned, often inferior) equivalents. The fact that customers and staff baye been begging for their return for often inferior) equivalents. The fact that customers and staff have been begging for their return for years is testimony enough that hundreds of music lovers were very satisfied with their JV60s. It's unfortunate but not by choice we stopped selling the JV60s - but now we can turn back the clock and bring affordable, high quality audio into the homes of hundreds more audibly pleased

Power Handling: 150WRMS

- Drivers:

 Woofers: 2 x 6.5" Vifa P17WJ cast magnesium basket, mineral filled polycone woofer
- Tweeters: Vifa D25AG aluminium alloy diaphragm, Ferro fluid cooled tweeter

For specifications on individual drivers, please see: Cat. CW-2106 Vifa P17WJ 6.5" Woofer

Cat. CT-2020 Vifa D25AG Tweeter



- 3-way, Linkwitz-Riley filter with polyswitch protection and impedance equalisation
 Tweeter: high pass, 12dB/octave at 3500Hz
- Mid-woofer: low pass, 6dB/octave at 3000Hz (greater when combined with driver's natural roll off)
- Sub-woofer: low pass, 6dB/octave at 200Hz (provides 3dB boost to frequencies below 200Hz)

- Bass reflex design with corner frequency of 35Hz
- pre-built with all holes cut
- Finished in "blackwood" veneer
 1090(H) x 250(W) x 260(D)mm (50L internal volume)

Cat. CS-2560 JV60 Speaker Kit with crossovers and accessories - pair Cat. CS-2562 JV60 Prebuilt cabinets - pair

Cat. CS-2564 JV60 Complete pre-assembled speakers - pair

7	Cat.	Qty 1+
JV60 Speaker Kit - pair	CS-2560	\$499.00
JV60 Prebuilt Cabinets - pair	CS-2562	\$199.00
JV60 Pre-assembled Speakers - pair	CS-2564	\$899.00

\$809.00 \$719.00 Vifa D25AG Tweeter

\$449.00

\$178.95

Over the last 20 years this iconic tweeter has found its way into countless OEM Hi-Fi, home theatre designs and high end speaker kits. Features an aluminium alloy diaphragm with high precision phase shield and butterfly voice coil assembly with Ferro fluid cooling

\$399.00

\$158.95

to ensure high power handling. A double chamber also provides a resonant frequency of 850Hz. Add one to your project or give your current speakers a new lease on life.

Specifications:	
Power handling	100WRMS
Nominal impedance	6 ohms
Frequency response	1.5kHz - 20kHz
Recommended crossover	3kHz, 12dB/octave
Sensitivity	89dB 1W@1m
Dimensions	A= 103 B= 93 C= 70 D= 35 (See diagram below)

<i>n</i>	Cat.	Qty I +	Qty 4+	Qty 10+
	CT-2020	\$69.95	\$62.95	\$55.95

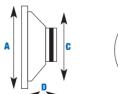
Vifa 6.5" DJ175WJ Woofer

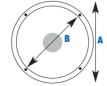
A brilliant and versatile driver that can be designed to perform to 40Hz or lower. Features include a cast magnesium basket, mineral filled polycone and smooth

Ideal for bass reflex enclosures of 10 - 30 litres.

Power handling	70WRMS	13			
Nominal impedance	8 ohms	400		1000	5
Frequency response	37Hz - 5kHz	-			
Sensitivity	88dB SPL @ 1W, 1m		- India		
Re	5.8 ohms		2		
Qms	1.55		NO SO TIMELED		
Qes	0.45	Vito			
Qts	0.35	viia			13 (5.5)
Vas	34.7l				WARRANTY
7	(Cat.	Qty 1+	Qty 4+	Qty 10+
	(CW-2106	\$99.00	\$88.95	\$78.95

SPEAKER DIMENSIONS





A = From one side to the other

B = Mounting holes - diagonal

C = Cut out in millimetres

D = Depth

ACOUSTIC "HOW TO" BOOK

Master Handbook of **Acoustics 5th Edition**

Technical enough, but not too technical and an essential reference source for anyone thinking about building a home studio, home theatre room or looking for an insight into the world of acoustics. Fully expanded to include the latest methods and software tools, the Master Handbook of Acoustics provides a hands-on approach to room design and acoustic parameters. The essential elements of acoustic design are covered - acoustic measurement, room dimensions speaker placement, room response, reverberation and how to build sound absorbers or diffusers. B00

Softcover, 510 pages, 235 x 190mm		
71	Cat.	Qty 1+
	BA-1490	\$72.00





Master Handbook

ACOUSTICS



Speaker Drivers

RESPONSE PAPER CONE WOOFERS

These Response woofers are excellent for replacement or for new speaker design construction. Not only are they price competitive and perform very well, but they also look fantastic! The concave treated paper cone matched with

rubber surround provides smooth overall response. Housed in strong steel frame baskets, high power magnet and voice coils, these drivers will produce massive quantities of clean bass output for any musical application.

4" Shielded Paper Cone Woofer/Midrange

Specifications:		Re	6 Ohms
Power handling	27WRMS	Qms	1.73
Nominal impedance	8 Ohms	Qes	0.67
Frequency response	70Hz - 7kHz	Qts	0.48
Sensitivity	86dB SPL @1W, 1m	Vas	5 litres
Tuning frequency		Fs	59.9Hz





7	Α	В	С	D(mm)	Cat.	Qty 1+	Qty 4+	Q
	116	109	93	65	CW-2190	\$24.95	\$22.35	\$

5" Shielded Paper Cone Woofer/Midrange

	Re	6 Ohms
50WRMS	Qms	1.40
8 Ohms	Qes	0.72
70Hz - 7kHz	Qts	0.47
88dB SPL @1W, 1m	Vas	7.3 litres
	Fs	67.6Hz
	8 Ohms 70Hz - 7kHz	50WRMS Qms 8 Ohms Qes 70Hz - 7kHz Qts 88dB SPL @1W, 1m Vas





7	Α	В	С	D(mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
	145	136	120	56	CW-2192	\$29.95	\$26.90	\$23.70

Cat.

6.5" Paper Cone Woofer/Midrange

Specifications:		Re	6 Ohms
Power handling	60WRMS	Qms	2.02
Nominal impedance	8 Ohms	Qes	0.57
Frequency response	44Hz - 7kHz	Qts	0.44
Sensitivity	89dB SPL @1W, 1m	Vas	19 litres
Tuning frequency		Fs	49.5Hz

D(mm)



Qty 1+ \$34.95





8" Paper Cone Woofer

Specifications:		Re	6 Ohms
Power handling	90WRMS	Qms	1.46
Nominal impedance	8 Ohms	Qes	0.43
Frequency response	38Hz - 4.5kHz	Qts	0.33
Sensitivity	89dB SPL @1W, 1m	Vas	86.8 litres
Tuning frequency		Fs	28.1Hz

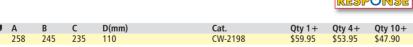




7	Α	В	C	D(mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
	220	212	182	92	CW-2196	\$39.95	\$35.90	\$31.90

10" Paper Cone Woofer

Specifications:		Re	5.41 Ohms
Power handling	225WRMS	Qms	1.01
Nominal impedance	8 Ohms	Qes	0.47
Frequency response	40Hz - 1kHz	Qts	0.32
Sensitivity	90dB SPL @1W, 1m	Vas	21.8 litres
Tuning frequency		Fs	59.8Hz



Cat.



12" Paper Cone Woofer

Specifications:		Re	5 Ohms
Power handling	225WRMS	Qms	3.46
Nominal impedance	8 Ohms	Qes	0.40
Frequency response	28 - 550Hz	Qts	0.36
Sensitivity	90dB SPL @1W, 1m	Vas	57.6 litres
Tuning frequency		Fs	23.1Hz

D(mm)







104

One unit is magnetically screened for applications where the device may be near a CRT screen, Home Theatre for example. The Titanium dome unit has quite a high power rating for a dome tweeter.

Both are ferrofluid filled which keeps the voice coils cool and adds to reliability. We are delighted with these products.

25mm Shielded Dome Tweeter

Featuring a damped soft dome silk tweeter, it offers extended frequency response with good dynamics resulting in a very clear and detailed sound.

D(mm)

D(mm)

RESPUNSE

Specifications:	
Power handling	20WRMS
Nominal impedance	8 Ohms
Frequency response	2 - 20kHz
Sensitivity	89dB SPL @1W, 1m

50WRM9

8 Ohms 2 - 20kHz

91dB SPL @1W. 1m



25mm Titanium Dome Tweeter

70

This tweeter features a titanium dome with a phase shield which provides a more controlled high frequency roll-off. It produces very crisp & clear high frequencies.

TOTI-OTI. IL	Frequency
	Sensitivity
TEII DUER	

Cat.

CT-2005

RESPUNSE

Cat. Qty 1+ Qty 4+ Qty	y 10+
CT-2007 \$19.95 \$17.70 \$1!	5.70

Qty 1+ \$7.95

Specifications Power handling

Nominal impedance Frequency response



RESPONSE TWEETERS

94 104

CTS previously known as Motorola have ceased production of their piezos and compression drivers which leaves finding a reliable and good quality replacement harder to come by. After a long search, we have finally found a range of Asian sourced alternatives that can offer similar performance and quality to match their US made counterparts.

We are proud to say that we could not fault these tweeters when we tested them. The best news is that they are at a fraction of the price, some are a quarter the cost of the comparable US made model. We are so confident about our tweeter range that we are branding them our own Response brand and offering a 2 year warranty

Response RSN1005 Piezo Tweeter

This unit is similar to the KSN1005. Does not require a crossover and is perfect for use for general PA applications where long throw is required

Specifications:	
Power handling	400W (max)
Nominal impedance	8 Ohms
Frequency response	1 - 20kHz
Sensitivity	93dB @1W, 0.5m



RESPONSE

7	Α	В	C	Dmm	Cat.	Qty 1+	Qty 4+	Qty 10+
	85	101	75	70	CT-1930	\$9.95	\$8.75	\$7.75



PLANAR TWEETERS

A planar tweeter's diaphragm consists of finely etched aluminium conductors attached to a thin Kapton film. This film is suspended between rows of Neodymium magnets that is directly excited by audio signals.

Due to its large yet lightweight voice coil which actually is the radiating membrane, these tweeters reproduce music with great detail, transparency and fast transient response.

Ribbon Tweeter - 100mm

All Audiophiles know that ribbon tweeters are the ultimate speaker for smooth high (and very high) frequency performance. This tweeter is made in Japan by the venerable manufacturer, Foster. The device itself has multiple ribbon "diaphragm" components in same-phase configuration. There are two basic types of ribbon tweeters, static or dynamic type. This product is the dynamic type which has conventional impedance 8Ω and is more efficient. Each speaker is supplied with a datasheet and securely packed.

Specifications:	
Power handling	20WRMS
Nominal impedance	8 Ohms
Frequency response	6 - 40kHz
Sensitivity	92dB SPL @1W, 1m
Crossover frequency	6.4kHz (12dB/octave)
NOTE!!!	

\$26.90

Qty 1+ \$29.95





The seventh edition of this world famous loudspeaker design "Bible" as used by manufacturers and amateurs alike! Totally updated and revised chapters, significantly more chapter footnote references and explanatory graphs. Includes new tutorials on woofer design, curvilinear vents, a brand new chapter on transmission line enclosures, CAD software, in car sound and 2 fully documented speaker designs. This fantastic book will teach you all you need to know to design, construct and test loudspeakers for your home stereo, home theatre and car. We can offer this new edition at a lower price than expected due to our negotiations with the publisher.

Cat.

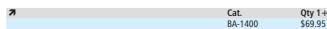
233 pages - soft coverMeasures: 275(H) x 213(W) x 19(D)mm

C(mm)





oudspeaker







Freecall order hotline: 1800 022 888

262

MINI COMMS SPEAKERS

Mini Communications Speakers

These mono speakers are small and can be mounted in any position, making them ideal for use with CBs and other communication devices. Includes screws and mounting bracket.

Impedance: 80hm

Power handling: 5W Max
Freq range: 100Hz - 15kHz
Lead length: 2m

• Termination: 3.5mm mono plug

• Dimensions:

AS-3185: 85(W) x 77(H) x 45(D)mm AS-3182: 130(W) x 80(H) x 59(D)mm





7		Cat.	Qty 1+	Qty 3+	Qty 6+
	Square	AS-3182	\$25.00	\$22.35	\$19.95
	Rectangular	AS-3185	\$19.95	\$17.70	\$15.70

ALL PURPOSE REPLACEMENT SPEAKERS





7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AS-3002	\$2.95	\$2.60	\$2.30







7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AS-3004	\$3.50	\$3.15	\$2.75

57mm (2.25") 80

As used in many projects 8Ω, 250mW Round (no mounting



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AS-3000	\$3.50	\$3.15	\$2.75

40MM 2W SILVER MYLAR CONF

As used in active MP3, iPod®s, laptops,

etc speaker systems.

• 40(dia) x 20 (H)mm

 4Ω, 2 Watts Clamp or glue mount



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AS-3028	\$8.95	\$7.95	\$6.95

Shielded 1" 1W 8-Ohm Full Range Speaker

Full range speakers suitable for use in surround speakers in home theatre system, computer multimedia speakers and portable speaker designs. It has advanced alloy cone design coated with special damping material. See website for full specifications, frequency curves and technical drawings.

TELL

• 4 x screw mounting holes • Dimensions: 36(L) x 36(W) x 13.1(D)mm

General Data	
Nominal Power Handling (Pnom)(W)	1
Max Power Handling (Pmax)(W)	2
Sensitivity (2.83v/1m)(dB)	79
Weight (M)(Kg)	0.03

Electrical Data	
Nominal Impedance (Z)(O)	8
DC (Re)(O)	6.5

Voice Coil and Magne	t Parameters	
VC Diameter (mm)	19	· Marine
VC Length (H)(mm)	3.4	
VC Former	CCAW	
VC Frame	Kapton	0
Magnet System	Shielded •	
Magnet Former	Neodymium	
Force Factor (BL)(N/A)	2.3	
Gap Height (He)(mm)	1.5	
Linear Excursion	0.95	
(Xmax)(mm)	0.93	

T-S Parameters	
Suspension Compliance (Cms)(uM/N)	626
Mechanical Q (Qms)	3.9
Electrical Q (Qes)	0.814
Total Q (Qts)	0.674
Moving Mass (Mms)(g)	0.56
Effective Piston Area (Sd)(m2)	0.0005
Equivalent Air Volume (Vas)(L)	0.04
Resonance Frequency (Fs)(Hz)	270

7	Size	Cat.	Qty 1+	- Qty 4+	Qty 10+
	1"	AS-3030	\$8.95	\$7.95	\$6.95

76mm (3") 80

1 Watt. Round. No mounting holes.



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AS-3006	\$4.25	\$3.75	\$3.30

4Ω , 2 Watts Diagonal mounting holes 115mm.



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AS-3008	\$4.75	\$4.15	\$3.75

4Q. 6 Watts

Diagonal mounting holes 120mm. 3oz. magnet.





7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AS-3010	\$5.95	\$5.25	\$4.75

50 X 90mm (2" X 3.5")

 8Q. 5 Watt Magnetically

Cat

AS-3025



\$6.25

\$5.50

Shielded 2" 10W 8-Ohm **Full Range Speaker**

Full range speakers suitable for use in surround speakers in home theatre system, computer multimedia speakers and portable speaker designs. It has advanced alloy cone design coated with special damping material. See website for full specifications, frequency curves and technical drawings.

• 4 x screw mounting holes

• Dimensions: 53(L) x 53(W) x 30.5(D)mm

General Data	
Nominal Power Handling (Pnom)(W)	10
Max Power Handling (Pmax)(W)	20
Sensitivity (2.83v/1m)(dB)	78
Weight (M)(Kg)	0.12

Electrical Data	
Nominal Impedance (Z)(O)	8
DC (Re)(O)	6.5

VC Diameter (mm)	25
VC Length (H)(mm)	6
VC Former	CCAW
VC Frame	Kapton
Magnet System	shielded
Magnet Former	Neodymium
Force Factor (BL)(N/A)	2.2
Gap Height (He)(mm)	3
Linear Excursion (Xmax)(mm)	1.5

T-S Parameters	
Suspension Compliance (Cms)(uM/N)	356
Mechanical Q (Qms)	4.6
Electrical Q (Qes)	2.2
Total Q (Qts)	1.56
Moving Mass (Mms)(g)	1.26
Effective Piston Area (Sd)(m2)	0.0013
Equivalent Air Volume (Vas)(L)	0.2
Resonance Frequency (Fs)(Hz)	260

7	Size	Cat.	Qty 1+	Qty 4+	Qty 10+
	2"	AS-3032	\$14.95	\$13.35	\$11.70

Shielded 3" 15W 8-Ohm Full Range Speaker

Full range speakers suitable for use in surround speakers in home theatre system, computer multimedia speakers and portable speaker designs. It has advanced alloy cone design coated with special damping material. See website for full specifications, frequency curves and technical drawings.

4 x screw mounting holes

• Dimensions: 90(Dia.) x 53(D)mm

General Data		
Nominal Power Handling (Pno	om)(W)	15
Max Power Handling (Pmax)(\	N)	30
Sensitivity (2.83v/1m)(dB)	82	
Weight (M)(Kg)	0.53	
Electrical Data		
Nominal Impedance (Z)(O)) 8		
DC (Pa)(O)	6.5	

DC (Re)(O)	0.0		
Voice Coil and Magne	t Parameters		
VC Diameter (mm)	20	-	
VC Length (H)(mm)	9	1	
VC Former	Kapton		
VC Frame	CCAW		
Magnet System	shielded		7
Magnet Former	Ferrite		
Force Factor (BL)(N/A)	3.06		
Gap Height (He)(mm)	3		
Linear Excursion (Xmax)(mm)	3		

(
T-S Parameters	
Suspension Compliance (Cms)(uM/N)	920
Mechanical Q (Qms)	3.75
Electrical Q (Qes)	1.15
Total Q (Qts)	0.88
Moving Mass (Mms)(g)	2.6
Effective Piston Area (Sd)(m2)	0.003
Equivalent Air Volume (Vas)(L)	1.19
Resonance Frequency (Fs)(Hz)	100

7	Size	Cat.	Qty 1+ Qty 4+ Qty 10+
	3"	AS-3034	\$19.95 \$17.70 \$15.70

\$6.95

Speaker Crossovers & Accessories

SPEAKER CROSSOVERS

2 Way Speaker Crossovers

- 3,500Hz / 12dB
 Crossover frequency 3,500Hz
- 12dB/octave rolloff
- 50WRMS • 8Ω
- Priced per unit.

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	CX-2612	\$19.95	\$17.70	\$15.70

3 Way Speaker Crossovers

700Hz / 3,500Hz / 12dB

- Crossover frequencies 700Hz and 3,500Hz
- 12dB/octave roll off
- 100WRMS
- 80
- Priced per unit.

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	CX-2618	\$39.95	\$35.90	\$31.90



DIY CROSSOVERS

Crossover Inductors

Power: All inductors shown have the wire gauge capacity to handle at least 100 Watts RMS with very little copper loss. See capacitor section for crossover capacitors.

· See our website for a guide to making speaker crossovers

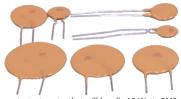


7 (L)	$DCR(\Omega)$	WireØmm	Core	Cat.	Qty 1+	Qty 5+	Qty 10+
0.05mH	0.25	0.8	Air	LF-1306	\$5.95	\$4.15	\$3.45
0.1mH	0.28	0.8	Air	LF-1308	\$5.95	\$4.15	\$3.45
0.22mH	0.3	0.8	Air	LF-1310	\$6.95	\$4.75	\$4.15
0.33mH	0.37	0.8	Air	LF-1312	\$7.45	\$4.95	\$4.45
0.39mH	0.41	0.8	Air	LF-1314	\$7.95	\$5.50	\$4.75
0.47mH	0.47	0.8	Air	LF-1316	\$9.95	\$6.75	\$5.75
0.56mH	0.52	0.8	Air	LF-1318	\$11.95	\$8.25	\$6.95
0.82mH	0.66	0.8	Air	LF-1320	\$13.95	\$9.75	\$8.25
1.0mH	0.74	0.8	Air	LF-1322	\$14.95	\$10.35	\$8.75
1.8mH	1.05	0.8	Air	LF-1326	\$15.95	\$10.95	\$9.50
2.7mH	1.31	0.8	Air	LF-1330	\$18.95	\$12.95	\$11.35
3.0mH	1.36	0.8	Air	LF-1332	\$19.95	\$13.70	\$11.70
5.6mH	0.5	1.0	Bar	LF-1334	\$22.95	\$15.95	\$13.70
9.0mH	0.95	0.8	Bar	LF-1336	\$24.95	\$17.35	\$14.70

SPEAKER ACCESSORIES

Polyswitches - Speaker Protection

Low cost speaker protection. More specifications ensure accurate choice for better protection. Polyswitches will protect against electrical (current) overload and will protect speakers in most situations. They are not fullproof and will not protect against mechanical overload. Select the device based on its trip



power rating W), eg. if you need to protect a tweeter that will handle 10 Watts RMS and it's rated at 8 Ohms you would select an RXE075 device. If in doubt, be conservative. Some experimentation may be necessary since music signals can vary a great deal. Simply connect in series with the speakers you wish to protect. See primers section of website for more technical info.

How they work. Polyswitch protectors are based on conductive polymers and act like resettable solid state circuit breakers. When the operating current of the protector is exceeded the interior of the device partially melts, which suddenly increases the volume which increases the resistance drastically. This in turn reduces the current. The device stays in this state while the current is maintained because its temperature is elevated. Once the current is removed, the device re-establishes itself almost immediately, so that the low resistance value is restored.

Voltage ratings RN3460/62 - 60 volts; the rest are 50 volts.

Cat.	Part No	Trip Watts 4Ω	Trip Watts 6Ω	Trip Watts 8Ω	Trip Current Amps
RN-3460	RXE075	5.1	7.7	10.2	1.50
RN-3462	RXE090	7.3	10.9	14.6	1.8
RN-3464	RXE110	10.9	16.3	21.8	2.2
RN-3466	RXE160	23.0	34.6	46.1	3.2
RN-3468	RXE185	31.4	47.0	62.7	3.7
RN-3470	RXE250	56.3	84.4	112.5	5.0

7	Part No.	Cat.	Qty 1+	Qty 10+	Qty 25+
	RXE075	RN-3460	\$2.95	\$2.60	\$2.30
	RXE090	RN-3462	\$3.25	\$2.90	\$2.60
	RXE110	RN-3464	\$3.50	\$3.15	\$2.75
	RXE160	RN-3466	\$3.95	\$3.45	\$3.15
	RXE185	RN-3468	\$3.95	\$3.45	\$3.15
	RXE250	RN-3470	\$4.50	\$3.95	\$3.60

Build Your Own Audio Valve Amplifier

Whilst solid state technology has seemingly surpassed the tradition of valve amplifiers, there is still some reluctance from many to give up the old tubes. This book will give a broad cross section in the details of valve state amplifiers. From construction projects for pre-amps and power amps, to the basic operation of the tube and power supplies. It also covers a basic history on the origin and development of the tube





Cat Qty 1+ RM-2483 \$39.95

CUSTOM MAKE YOUR OWN HOME HI-FI SPEAKER CROSSOVERS

Now you can design your own 6 or 12dB/octave high, low or bandpass filters to custom make a crossover system exactly to fit your needs! Simply check the crossover schematic chart to select a suitable crossover. You may, for example, want a crossover for a subwoofer. This is simply a low-pass filter. If you want a bandpass filter, simply connect a low pass circuit in series with a high pass circuit. The band of audio frequencies BELOW the low

pass but ABOVE the high pass will not be attenuated. If you use a 6dB/octave filter, the combined bandpass circuit will have a 6dB/octave slope either side of the pass band. Obviously if a 12dB/octave circuit is used, the slope on either side of the pass band will be 12dB/octave.

 Note that capacitance is calculated in Farads and inductance in Henries.

Formulae	for Calculati	ing Crossovei	r Components

• 250 pages - soft cover. Dimensions: 150 x 225mm.

R=Speaker Impedance (Ω) f= Crossover Frequency (Hz) π = Pi = \approx 3.141592654

C= Capacitance L= Inductance

PASSIVE CROSSOVER CHARTS



6 dB/OCTAVE X-OVER CHART							
X-OVER		2 OHM	4 0	нм	80	нм	
FREQ	L(coil)	C(cap)	L(coil)	C(cap)	L(coil)	C(cap)	
80	4.1mH	1000uF	8.2mH	500uF	16mH	250uF	
100	3.1mH	800uF	6.2mH	400uF	1,2mH	200uF	
125	2.5mH	640uF	5.0mH	320uF	10mH	160uF	
150	2.0mH	530uF	4.0mH	260uF	9.0mH	130uF	
200	1.6mH	400uF	3.5mH	200uF	6.8mH	100uF	
260	1.2mH	300uF	2.5mH	150uF	5.0mH	75uF	
400	.8mH	200uF	1.6mH	100uF	3.3mH	50uF	
600	.5mH	140uF	1.0mH	70uF	2.0mH	35uF	
800	.4mH	100uF	.8mH	50uF	1.6mH	25uF	
1000	.3mH	80uF	.6mH	40uF	1.2mH	20uF	
1500	.2mH	50uF	.4mH	25uF	.8mH	13uF	
2000	.15mH	40uF	.3mH	20uF	.6mH	10uF	
3000	.1mH	25uF	.2mH	13uF	.4mH	6.6uF	
4000	.08mH	20uF	.15mH	10uF	.3mH	5uF	
5000	.06mH	16uF	.12mH	8uF	.25mH	4uF	
6000	.05mH	13uF	.1mH	6.6uF	.2mH	3.3uF	
8000	.04mH	10uF	.08mH	5uF	.16mH	2.5uF	
10000	.03mH	8uF	.06mH	4uF	.12mH	2uF	

Freecall order hotline: 1800 022 888

	12	2 dB/OCT	AVE X-OV	ER CHAR	T	
X-OVER	2 0	HM	4 (ЭНМ	8 01	-IM
FREQ	L(coil)	C(cap)	L(coil)	C(cap)	L(coil)	C(cap)
80	5.6mH	700uF	11mH	330uF	22mH	180uF
100	4.5mH	550uF	9mH	270uF	18mH	135uF
125	3.5mH	450uF	7mH	220uF	14mH	110uF
150	3.0mH	375uF	6.0mH	180uF	12mH	90uF
200	2.3mH	281uF	4.5mH	140uF	9mH	70uF
260	1.7mH	220uF	3.5mH	100uF	7mH	50uF
400	1.1mH	140uF	2.2mH	70uF	4.5mH	35uF
600	.75mH	100uF	1.5mH	50uF	3.0mH	25uF
800	.56mH	68uF	1.0mH	33uF	2.0mH	15uF
1000	.45mH	55uF	.9mH	27uF	1.8mH	13uF
1500	.3mH	36uF	.6mH	18uF	1.2mH	10uF
2000	.22mH	28uF	.45mH	14uF	.9mH	7uF
3000	.15mH	19uF	.3mH	10uF	.6mH	4.6uF
4000	.11mH	14uF	.225mH	7uF	.45mH	3.5uF
5000	.09mH	10uF	.18mH	5.6uF	.36mH	2.8uF
6000	.075mH	9.3uF	.15mH	4.6uF	.3mH	2.3uF
8000	.056mH	7uF	.11mH	3.5uF	.25mH	1.7uF
10000	.045mH	5.6uF	.09mH	2.8uF	.18mH	1.4uF

Speaker Switchers & Accessories

SPEAKER ACCESSORIES (CONTINUED)

2 Way Speaker Selector Switch

This switch allows two pairs of speakers to be run from an amplifier with only one set of outputs, or two pairs of speakers from the one speaker cable. Listen to either pair of speakers separately, or both on together.

· Simple screw terminals accept

- Simple Sciew terminals accept speaker cabling.
 Supplied in a plastic case with rubber feet.
 Designed for 8 Ohm speakers.
 Power handling 50WRMS max per channel.

- Dimensions: 160(W) x 100(D) x 40(H)mm.



7	2 Way	Cat.	Qty 1+	Qty 4+	Qty 10+
		AC-1640	\$19.95	\$17.70	\$15.70

Five Way Speaker Switch

A home entertainment switch box that allows up to five pairs of stereo speakers to be connected to a hi-fi system through a single stereo output terminal. Each pair of speakers may be individually turned on or off in any combination. Also features a separate headphone output socket.



- Push button selectors Compact design
- Easy to install
- Dimensions: 203(L) x 103(D) x 45(H)mm

7	5 Way	Cat.	Qty 1+	Qty 4+	Qty 10+
		AC-1643	\$39.95	\$35.90	\$31.90

8 Port Parallel Speaker Hub

A great multi-speaker output hub, this unit can distribute output from your amplifier or receiver to up to eight pairs of speakers. Its lightweight compact chassis make it suitable for wall

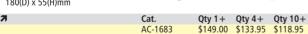


7	Cat.	Qty 1+
	AC-1663	\$24.95

6 Way Speaker Selector

This speaker selector box is perfect for anyone with a multi-room speaker system that they want to run from a master source. This selector box allows you to connect up to 6 pairs of speakers to your amplifier, and select any number of those pairs to play your music simultaneously.

- Solid metal construction
- · Compatible with amplifiers
- up to 150 watts per channel Terminals accept up to 14-gauge wire
- Built-in protection circuit
 Dimensions: 285(W) x
- 180(D) x 55(H)mm



50 Watt RMS Fader (L-Pads)

Ideal for controlling the volume of extension speakers, where they are in another room or location from the amplifier. Can be mounted in-line, or even in the speaker box itself. It has a constant impedance design suited to 8Ω systems. Supplied with plastic face plate. Rated at 50W RMS.

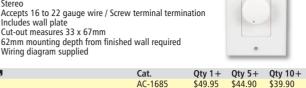


Qty 5+ Qty 10+ Mono AC-1672 \$20.35 \$18.35

Speaker Attenuator - 70W

Attenuates the audio signal by 46dB on an 8-Ohm system.

- · Graduated in 12 steps
- Stereo
- Includes wall plate



Speaker Attenuator - 100W

A neat and functional solution for controlling the sound level in your multi-room audio speaker installation. The attenuator has 12 step level and fits in a single gang wallplate mount. It allows connection of up to 8 pairs of speakers to one stereo amplifier while maintaining correct impedance match between amp and speakers.





WARRANTO				
	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1665	\$59.95	\$53.95	\$47.90

Sound Dampening Pads

Mainly designed for car audio, but could be used in any speaker application. These pads are installed inside the door skins opposite the back of the speaker drivers. They absorb standing waves and resonances so you get maximum performance. Each pack includes cyanoacrylate glue for installation.

Sound Dampening Pad 7" - Pair AX-3665
• Suitable for 5 - 7" speakers

Sound Dampening Pad 12" - Single AX-3666
• Suitable for subs 10 - 15"





1	Cat.	Qty 1+
7" Pads - Pair	AX-3665	\$19.95
12" Pad - Single	AX-3666	\$19.95

Butyl Based Sound Deadening Material

Give your vibrating buzz-box a luxury car ride with this butyl-based, foil backed sound deadening material. By adding weight to the metal panels of your car, such as door skins, boot lids, quarter panels, etc, you can stop nasty or your car, such as door skins, boot lids, quarter panels, etc., vibrations, reduce road noise, and give your doors and boot a nice solid "thud" when they shut. Each sheet is self-adhesive, and can be easily moulded, cut and stuck onto virtually any metal surface of your vehicle's body, giving you a pleasant, quiet and comfortable ride.

Combine with our AX-3662 Sound

Absorbing foam to add thermal insulation

and eliminate low frequency humming from big exhaust systems for an even more

• Thickness: 1.5mm

Temperature range: -10 - 110°C

Dimensions: 900 x 330mm				WARRANT
7	Cat.	Qty 1+	Qty 4+	Qty 10
	AX-3687	\$29.95	\$26.90	\$23.70

Combination Butyl/Foam Super Sound Deadener

Combining both the sound deadening properties of butyl material, and insulating properties of honeycomb foam, this is an easy single application solution for complete sound deadening and isolation that also offers thermal insulation. Consisting of a layer of our AX-3687 Butyl Based sound deadener and a 3.0mm thick layer of honeycomb foam

(similar to our AX-3662), lining the cabin of your vehicle with these sound deadening sheets will give you drastically reduced road noise, less panel vibration and a cooler cabin temperature. Application is easy with the self adhesive backing and the ability to mould to the shape of the panel. Ideal for door skins, head linings, door cards and under bonnet insulation.

Thickness: 4.5mm (1.5mm butyl, 3.0mm foam)

• Temperature range: -10 - 100°C
• Dimensions: 660 x 330mm

Dimensional Gook Socialis				
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AX-3689	\$29.95	\$26.90	\$23.70

SPEAKER ACCESSORIES (CONTINUED)

Metal Speaker Protection Grilles with Clips

Made from strong perforated steel, these quality grilles are designed to protect Hi-Fi or PA speakers in cabinets, cars, etc. Eight sizes to choose from, each supplied with clips to firmly mount grilles to speaker boxes



7	Cat.	Qty 1+	Qty 5+	Qty 10+
4" Speaker	AX-3590	\$4.00	\$3.60	\$3.15
5" Speaker	AX-3591	\$5.00	\$4.45	\$3.95
6" Speaker	AX-3592	\$6.00	\$5.25	\$4.75
6.5" Speaker	AX-3593	\$6.50	\$5.75	\$4.95
8" Speaker	AX-3594	\$8.00	\$6.95	\$6.25
10" Speaker	AX-3595	\$9.00	\$7.95	\$6.95
12" Speaker	AX-3596	\$10.00	\$8.95	\$7.95
15" Speaker	AX-3598	\$12.00	\$10.70	\$9.50

Small Mini Size Speaker Grille Clips

Plug and socket arrangement to firmly hold the grille in place on home wooden cabinet type speakers. Easy to use - simply drill the hole and push in. Male part requires 4.5mm diameter hole and 5mm deep. Female requires 10mm diameter hole by 15.5mm deep. Set of 4 pairs supplied enough for 1 speaker box.



7	Cat.	Qty 1+	Qty 5+	Qty 10+
Pkt 4	CF-2761	\$4.95	\$4.45	\$3.90

SPEAKER BRACKETS & STANDS

Speaker Bracket & Stands

This universal speaker mount is ideal for surround style speakers and home theatre applications. Compatible with many major brands of speakers it can be used for both ceiling and wall mounting. Features four axis, tilt and rotation adjustments. Extension and keyhole adaptors included. Designed for mounting small speakers up to 5kg (2kg if using the post mount option).

Available individually or in a pack of two



7	Cat.	Qty 1+	Qty 5+	Qty 10+
1 Bracket	CW-2808	\$11.95	\$10.70	\$9.50
2 Brackets	CW-2809	\$19.95	\$17.70	\$15.70

Speaker Wall Brackets

Ideal for mounting home cinema effects speakers

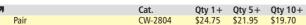
- · Made from high grade glass reinforced nylon for durability
- Suits small to medium speakers up to 5kgs (11 pounds)
 • Fully adjustable in all directions
- Supplied with a comprehensive range of fasteners for a variety of speaker types
- Black in colour

2012 20 2 pair				C. MARINE
7	Cat.	Qty 1+	Qty 5+	Qty 10+
Pair	CW-2820	\$24.95	\$22.35	\$19.70

Mini Universal Speaker Brackets

Well designed, made of super strong ABS plastic, this attractive two-piece swivel bracket is easy to install and adjust (Phillips head screwdriver required). Primarily designed for mounting small / medium sized speakers for surround sound setups, it could be used for mounting security lights, CCD cameras etc.

- Angle variation: Vertical 45° / Horizontal >180°
- Wall mount section dimensions: 46(W) x 93(H) x 61(D) mm
- Speaker mount dimensions: 41(W) x 83(H) x 61(D)mm Distance from speaker to wall: 80mm
- Two pieces supplied, one per speaker
- Will hold up to 7.5kg



Wall Brackets for Top Hat Mount PA Speakers

Top hat mount PA speakers mount easily on these heavy duty wall brackets. Each has a 25kg weight capacity and functionally swivel left and right as well as at 114 45° down; making them perfect for public venues such as school halls. pubs and clubs. Two models available - a fixed arm wall bracket and an adjustable arm wall bracket for small to large PA speakers.

FIXED ARM

WALL BRACKET

Wall bracket: 119(W) x 200(H)mm Mounting arm: 290(L)mm

ADJUSTABLE ARM WALL BRACKET

Wall bracket: 119(W) x 230(H)mm Mounting arm: 350-420(L)mm





					_
7		Cat.	Qty 1+	Qty 5+	Qty 10+
Fi	xed Arm	CW-2801	\$19.95	\$17.70	\$15.70
A	diustable Arm	CW-2802	\$24.95	\$22.35	\$19.70

Ceiling / Wall Speaker Bracket - Steel

This sturdy bracket has main axis angle adjustment by a diecast, toothed plate secured by a wing nut. The detents won't slip as can happen with ball types. Minor axis adjustment is by a handwheel with backup by lock screw. As a safety measure a steel wire lanyard easily secures the two halves of the bracket - a good safety feature that is common in professional P.A Installations. The wall plate has holes for 4 x 6mm (or 1/4") screws. Another hole is provided for speaker wire egress. The speaker mounting plate has 4 x 4mm holes and also two slotted holes.

Sold individually

- 15	
Specifications	
Max Speaker box weight	10kg
Angle Variation	Main - over 180°
	Minor - 360°
Wall mount plate	100(W) x 105(H) mm
Speaker mount plate	80(W) x 45(H) mm
Distance from speaker to wall	135mm



Cat. CW-2841

See page 245 for our range of AV wall brackets

Extra Heavy Duty Speaker Tripod Stand

This rugged stand extends to just under 2 metres support speakers, combo amps or lighting rigs up to and around 45 kilos. Tough rubber feet are mounted under each tripod leg for safe, non-slip support and there's even a steel stopper-rod which inserts into the extension shaft, preventing heavily weighted equipment from sliding the shaft back into the base. The speaker base itself includes both slotted and standard mounting holes to suit a wide range of PA related equipment. Made from strong aircraft grade aluminium for easy transportation & long service life.

- Support base max 1110mm
- Use with our top hat HS-8035.



7	Cat.	Qty 1+	Qty 5+	Qty 10+
Each	CW-2860	\$99.00	\$88.95	\$78.95

Strap Handle

Incorporates metal sections on each end which hold the handle, and the rubber strap part returns flat after use. Total length 255mm x 27mm.



- · Strap is steel reinforced.
- 2 x 8-10g screws required

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	HS-8022	\$5.95	\$5.25	\$4.75

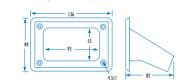
Cat.

HS-8012

Pocket Handle

Suitable for chipboard speaker cabinets or metal enclosures Panel cutout 102 x 48mm

4 x 8-10g screws required



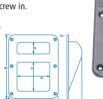


Cabinet Handle

If you are having trouble lifting speaker cabinets, PA bins, or any large box, try these handles. They are easy to fit and make lifting a breeze.

- · Just cut hole, drill holes and screw in.
- 6 x 8-10g screws required Cutout size 122mm x 164mm.
- Dimensions:

165(W) x 210(L)mm.



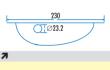


		-		
71	Cat.	Qty 1+	Qty 5+	Qty 10+
	HS-8010	\$11.95	\$10.70	\$9.50

Large Steel Cabinet Handle

Use these heavy duty handles to assist in transporting large speaker boxes and similar PA equipment.

- Requires a cutout 240mm(H) x 120(W)mm with a depth of 63mm
 Actual size 230(H) x 160(W) x 63(D)mm.
- Handle diameter 25.5mm, black powdercoat finish
- Great for quad boxes, foldback monitors and guitar amplifiers etc.
- 10 x 8-10g screws required.







Cat Qty 5+ Qty 10+ HS-8008

Metal Cabinet Handles

Quality plated steel cabinet handle. Recessed handle with black rubber grip and spring return.

- Cutout size 128 x 74mm.
- Available in black and silver.
 10 x 8-10g screws required.

	J	•				
7			Cat.	Qty 1+	Qty 5+	Qty 10+
	Silver		HS-8015	\$16.95	\$14.95	\$13.35
	Black		HS-8016	\$16.95	\$14.95	\$13.35

Metal Speaker Plate

This blank plate is pressed out of black painted 1mm mild steel and has many uses. It can be used as an inspection cover or can be easily drilled to accept panel hardware such as speaker terminals, phone jacks, etc.

- 6 x 8 -10g screws required.
 Panel cutout: 112(W) x 65 (H)mm.
- Overall size: 136(W) x 89 (H)mm.



71	Cat.	Qty 1+	Qty 5+	Qty 10+
	HS-8031	\$7.50	\$6.75	\$5.95

Metal Corner Protectors

Pack of 8

Keep the corners of your PA bins or party speakers undamaged. Just screw these on to your speakers and start throwing them around! All solid 1mm thick steel, black colour. Curved (10mm radius) for rounded edge boxes, amps, speaker cabinets, etc.

- Ideal for carpet or vinyl covered gear.
 Each leg extends 40mm from corner in 3 directions
- Legs punched at ends with 4.3mm hole for round head screw fixing
- 3 x 8-10g pan head screws required

7	Cat.	Qty 1+	Qty 5+	Qty 10+
Pkt 8	HM-3843	\$16.95	\$14.95	\$13.35

Plastic Locking Corner Piece

Pack of 8

Heavy duty plastic moulded corner fitting featuring male/female inserts. These are designed to fit together so that pieces of equipment (the same size) can be stacked up and locked

- · Ideal for stacking speaker boxes
- Has 4 x 4mm pan head fixing holes
 Dimensions: 84(H) x 50mm each side

7	Cat.	Qty 1+	Qty 5+	Qty 10+
Pkt 8	HM-3829	\$13.95	\$12.35	\$10.95

Speaker Cabinet Spikes

Pack of 4

Mount these adjustable spikes on the base of your speaker cabinets and enjoy not only better sound, but far greater stability, especially on carpeted floors. Supplied in a set for one speaker box, which includes:

- · 4 adjustable spikes (spike length 25mm)
- 4 locking nuts
- · 4 cabinet threads with hex head
- 4 floor protectors for wooden floors

Note: 1 box only, 2 sets required for stereo

7	Cat.	Qty 1+	Qty 5+	Qty 10+
Pkt 4	HS-8002	\$12.95	\$11.35	\$10.35

Gold Speaker Stands

These are solid metal construction and gold plated. They are designed to couple the box to the floor which in turn reduces resonances which are transferred from speaker boxes. They are also height adjustable if the floor is uneven. Set consists of 4 spikes with adjustable height, 4 bases for protection of spikes on wooden floors etc, and 2 sticky pads for holding them in place. Set of 4 for one box only. You need 2 sets for 1 pair of







7	Cat.	Qty 1+	Qty 5+	Qty 10+
Pkt 4	HS-8000	\$24.95	\$22.35	\$19.70

Quality Equipment Feet

You have probably seen new up market Hi-Fi equipment with large round feet - they give the piece of equipment a high class look. Well, now you can do it to your own gear. They are made of black rubber, with a silver metal edge on the bottom. They mount with a screw and nut (not supplied).



· Size - dia 43mm, height 13mm

7	Cat.	Qty 1+	Qty 5+	Qty 10+
Each	HP-0834	\$4.90	\$4.30	\$3.90

Speaker Box Stand Adaptor "Top Hat"

This nifty bracket mounts inside the speaker box and accepts the standard PA type speaker stand. The advantages of inside mounting are obvious to those in the business - no unruly brackets sticking out of the bottom or sides of speaker bins to scratch equipment, and make packing up difficult.

The bracket is made of high grade steel and black powder coated.

- It is the standard length approx 100mm
- · Round 115mm flange for mounting with 4 screw holes.

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	HS-8035	\$14.95	\$13.35	\$11.70



SPEAKER/EQUIPMENT CABINET FITTINGS

Speaker Box Ports

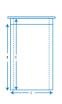
These ports are flared to minimise air turbulence. They can be press fitted to the cabinet then sealed with caulk or silastic. Length: 120mm



71	Cat.	Qty 1+	Qty 5+	Qty 10+
	CX-2688	\$4.95	\$4.45	\$3.90

ADJUSTABLE

Tubes suitable for bass reflex enclosures







Specifications	A (dia)	B (dia)	C (width)	D (outer)	E (inner)
CX-2680	47.4	57.2		102	
CX-2681	50	80.4	60.6	150	140
CX-2682	66	92	77.5	138	128
CX-2684	110	145	121.5	149.5	140

Cat. CX-2680	Inner Diameter 50mm
Cat. CX-2681	Inner Diameter 50mm
Cat. CX-2682	Inner Diameter 66mm
Cat. CX-2684	Inner Diameter 110mm

Length 100mm Adjustable Length 150 to 280mm Adjustable Length 140 to 265mm Adjustable Length 160 to 280mm

7	Cat.	Qty 1+	Qty 5+	Qty 10+
Inner Diameter 50mm	CX-2680	\$5.20	\$4.60	\$4.15
Inner Diameter 50mm	CX-2681	\$6.25	\$5.50	\$4.95
Inner Diameter 66mm	CX-2682	\$7.50	\$6.75	\$5.95
Inner Diameter 110mm	CX-2684	\$13.95	\$12.35	\$10.95

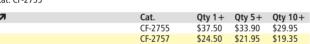
Speaker Carpet

This light duty speaker carpet is ideal for parcel trays and sub boxes, the light grey colour is a good match for most car interiors. Can be easily worked around corners, edges etc.

• Size is 1m x 1.4m x 2mm Cat. CF-2757

This heavy duty black carpet is designed for use on PA speaker bins or car subwoofer boxes





Spray-On Contact Adhesive

This pressure-sensitive contact adhesive is in an aerosol can, and bonds to paper, fabric, leather, rubber, foam, vinyl, concrete, metal, in fact almost any surface! No more spills and dribbles from a tube, or sticky screwdrivers (and plastic applicators) from applying glue to a surface. Great for laying innerbond and speaker carpet in/on speaker cabinets etc.



Size 400g.Cannot be sent by air freight or post.





RVIS

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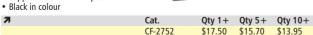
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				100
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	NA-1504	\$16.95	\$14.95	\$13.35

Grill Cloth

High quality, acoustically transparent grill cloth is ideal for protecting expensive drivers and allowing all of the sound to get through.



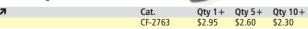


Hook and Loop Tape

Ideal for holding grilles on speaker cabinets. One side is glued or stapled to the box & the other to the grille. The grille then sticks to the box.



• 300mm long



SPEAKER CABINET & SOUNDPROOFING

Acoustic Sound Absorbing Tiles



38mm tile shown as supplied finish



Factory coloured finish available on order (minimum quantities apply) Sizes for these are different to the grey ones stocked Dimensions: 457 x 457 x 25mm or 457 x 457 x 38mm

See page 416 for Sound

Dampening Material for Cars.

This range of scientifically designed polyester urethane tiles are ideal for many acoustic treatment applications like standing waves, flutter and slap echo within a room. They are not suitable for sound attenuation, but rather for acoustic treatment within a room.

Applications include

25MM TILE (300 X 300MM)

MATING MALE/FEMALE (2 TILES)

- Recording studios
 Schools/Colleges
- Radio/TV broadcasting
- Home cinema
- Standing acoustic wave problems
 Tuning rooms for acoustic performance
- Anechoic chambers

This material is available in two thicknesses; 25mm and 38mm. The 25mm is very economical and will suit most applications especially domestic where price is a major consideration. The 38mm product has far greater absorption and is better for professional or serious acoustic applications. The tiles come as a matting male/female pair. Each tile is 300 x 300mm and has a slight bevelled edge which produces a pleasing effect when the tiles are laid. The tiles are made from fire retardant polyester urethane #R- 200- U. They can be spray painted and do not sag in any position. They can be attached to virtually any clean, dry, stable surface with double sided adhesive foam tape or virtually any type of contact type adhesive. As you can see they have an

attractive appearance when suitably painted AX-3652 Acoustic Tiles 300 x 300 x 25mm Pk2 AX-3656 Acoustic Tiles 300 x 300 x 38mm Pk2

NESTED MALE/FEMALE (2 TILES)

7	(L)	(W)	(D)mm	Cat.	Qty 1+	Qty 5+	Qty 10+
	300	300	25	AX-3652	\$29.95	\$26.90	\$23.70
	300	300	38	AX-3656	\$32.95	\$29.45	\$26.45

650gsm Acrylic Speaker Damping Material

Used to line speaker boxes for standing wave/resonance absorption. Also very effective for making acoustic treatment like bass traps in sound rooms and studios.

- High density 700(W) x 1000(L) mm
- White in colour

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	AX-3694	\$12.50	\$10.95	\$9.95

Sound Absorption Mat for Equipment

The noise of modern equipment can really annoy end users. To solve this with your equipment, we have sourced this high quality sound absorption material which is quick and easy to install. The honeycomb



material is chosen specifically due to its ability to reduce fan noise, vibrations, compressors and motors. Cooling fans in equipment is a particular annoyance to users and this material is perfect for reducing sound levels!

With its self adhesive backing, just cut to size stick on the inside of your equipment & installation is completed. No mess or fuss. Made to UL94-VO flammability classification.

• Dimensions: 140 x 180mm, 2 sheets per pack

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AX-3660	\$18.95	\$16.95	\$14.95

DID YOU KNOW...

Heinrich Hertz (1857 - 1894)

A German physicist who clarified and expanded the electromagnetic theory of light that had been put forth by James Clerk Maxwell. He was the first

to prove conclusively the existence of electromagnetic waves. The scientific unit of frequency - cycles per second - uses his name, Hertz.

Instruments & PA Speaker Systems

INSTRUMENTS & ACCESSORIES

Acoustic Guitar with Magix Music Maker Software & USB Connection



A complete composition, arranging and recording package, suitable not just for the entry level player, but also for the more advanced musician. The guitar is a steel string acoustic with laminated top and sides. It has a built-in LCD tuner and 3-band EQ with presence control. It can be directly interfaced to a PC via USB B cable or played through a high-Z output to an amplifier or to the high-Z input on a mixing desk or PA.

The bundled recording software, Magix Music Maker SE, is one of the easiest and most intuitive programs going around. Even the most inexperienced user of PC-based recording will find it very easy to start recording tracks in seconds. You can then arrange, edit, build and mix tracks with intuitive, easy-to-use tools that provide a precise, professional audio editing experience. The set of tools and effects makes embellishing, editing and creating new tracks from scratch an enjoyable experience that is built to accompany users familiar with audio editing and production software and those trying it for the first time

- · No drivers required
- Compatible with XP, Vista, 7
- · Intuitive drag and drop software
- Chromatic tuner
- 3-band EQ ±12dB on each band
- Mac compatible Gig bag included

SPARE STRINGS Cat CS-2558 Light gauge set .011, .015, .024, .031, .038, .048. Round wound bronze, wound third.



7	Cat.	Qty 1+	
USB Guitar	CS-2559	\$189.00	
Spare Strings	CS-2558	\$7.95	

Portable Practice Amp with 32 Built-In Drum Patterns

Guitar practice amps have never been so portable and feature packed! Suitable for use as a "first amp" or "warm-up amp" before gigs. The Mini Jam is compact and light enough to be easily transported between venues or to sit comfortably on your bedside table. As you play dial in a wide variety of sounds using the volume, gain and tone controls. You can crank up the gain by flicking on the distortion switch for even more variety. Acting like a metronome, the 32 built-in rhythm patterns (produced from real drum samples) allows you to hone your guitar playing skills across popular music genres: rock, blues, RnB, jazz, ballad, funk, metal and hip hop. Intuitively adjust the tempo and volume as required. Use it as a guide to maintain the beat or to help you sketch your original music ideas and riffs. Finally plug in your MP3 or CD player and test your progress by jamming with your heroes. Practice anywhere, anytime; be a rock star!

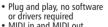
Bring your guitar in & try it!!

- 2W, mono
- Rugged design for durability
 32 built-in rhythm patterns (live drum recordings)
 Overdrive with tone control
- Distortion switch for high-gain AUX-IN jack to connect a CD/MP3 player
- Headphone jack for private practice
- Built-in E-string tuner 9V alkaline battery (not incl) provides up to 8 hours of playing
- Dimensions: 180(L) x 90(W) x 155(H)mm

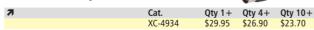


USB MIDI Interface Cable

Connect any MIDI device to your computer: keyboards, controllers, instruments, sound cards, samplers, drum machines etc



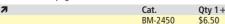
 MIDI in and MIDI out connectors with LED indication · Cable is 2 metres long



Electronic Musical Projects

This book has 30 projects to build based around musical instruments. Projects include - metronome x 4, guitar practice, accompaniment drummer, quitar bass booster, treble boost preamp, presence boost, connecting guitar pickups, guitar preamps, practice amp, envelope control, distortion box, waa waa, echo and reverb, tremolo, sustain, phasers, bonger, percussion box, sound generators, organ, etc.

• Soft cover. 52 pages 135 x 210mm.





PUBLIC ADDRESS SYSTEMS

Belt Pack Portable PAs

A stylish portable PA speaker designed to be worn around the waist. These fully self contained amplified speakers will allow you to be heard over a crowd or noisy environments. Both units are supplied with a comfortable wired headset microphone with flexible boom. Integrated with rechargeable batteries; unit is suitable for outdoor activities, lectures/presentation, aerobics, sports, etc.
Two models are available both with:



- · Mains charger included
- Aux audio input
- 1000mAh rechargeable battery

PORTABLE PA 3.5" SPEAKER

Basic model with 3.5mm auxiliary audio input for MP3 or iPod® Cat AM-4060

PORTABLE PA WITH MP3

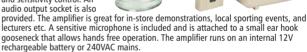
Unit Includes USB/SD card slot with integrated MP3 player. Cat AM-4062



7	Cat.	Qty 1+	Qty 4+	Qty 10+
Portable PA Speaker	AM-4060	\$69.00	\$61.95	\$54.95
Portable PA Speaker - MP3 Player	AM-4062	\$89.00	\$79.95	\$70.95

Portable Wireless PA Amplifier & Microphone

The system consists of a compact yet powerful amplifier with a built in crystal locked radio receiver and a wireless microphone. The system includes a master volume control and tone control and is also equipped to accept a wired microphone and an auxilliary music source. The wireless microphone transmitter has an on/off/stand by switch, microphone jack, and sensitivity control. An



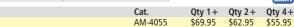
- 20WRMS output
- 6 inch speaker
- 100Hz to 16kHz bandwidth
 Size 305(H) x 182(W) x 125(D)mm

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AM-4075	\$99.00	\$88.95	\$78.95

10 Watt Multifunction Megaphone with Message Recorder and Torch

Get your message across loud and clear with this megaphone. Battery operated, simple to operate and outputs up to 10WRMS. It features a volume control, alarm and whistle function to get attention and has a built in message recorder which allows you to replay announcements repeatedly. It even has a 3W high power LED torch for night time search and rescue applications. Ideal for sporting events, crowd control, peaceful rallies, or when evacuating a building.

10WRMS
110-115dB
8 x AA batteries
270 (L) x 162(W) x 235(H)mm
Cat





PA & Party Speakers

PUBLIC ADDRESS SPEAKERS



15" Party Speaker

Great for entertainment and party use! These rugged party speakers will provide you with good overall performance delivering 120WRMS. They are sensitive enough to be powered from a modest 30WRMS and is also protected from over powering by a PTC speaker protector. Each covered in a black hard wearing carpet with plastic corner protectors, the 15" woofer is protected by a tough metal grille to protect from dancing feet and

- deliberate abuse 1 x 15 inch woofer
- 1 x Wide dispersion piezo horn

94dB/W

8 ohms

25.5kg

120WRMS 45Hz - 19kHz 740 x 505 x 350mm

• 3 x Piezo tweeters Specifications Efficiency





"		
	Fach	

Impedance

Power handling

Frequency resp Enclosure size Weight

CS-2515

\$179.00

\$160.95 \$142.95

12" Subwoofer

Add this high performance subwoofer to your existing system and really get a boost to your music system's low frequency performance. The cabinet is finished in leatherette vinyl and houses a 12", 4 ohm subwoofer rated at 300 watts RMS and protected by a steel mesh grille. The speaker system is perfect for boosting the bass frequencies of music systems in bars, clubs, and parties etc. DJs will love it!

Specifications	
Speaker Size	12"
Frequency Response	40Hz to 180Hz
Power Handling	300 WRMS
Enclosure Size	480(W) x 580(H) x 440(D)mm
Weight	30kg





Cheaper than

Hiring!





Note: This is an ideal companion to the 15" party speaker.





This speaker can handle a massive 200WRMS and is an excellent addition to any entertainment system. The PA speaker provides good performance in difficult locations such as backyards, tents, party rooms or halls etc. The boxes are molded from high impact resin and a tough metal grille protects the main driver. An efficient piezo driver handles the upper mid & treble frequencies and the bass is produced by a 12" driver with a heavy (1kg) magnet. These speakers could be used for PA applications but are great for party use

Qty 1+

\$149.00



• 1 x wide dispersion piezo horn





Cat.

CS-2514



Otv 4+

\$178.95

Qty 1+

\$199.00





Each 200W/300W Active PA Speakers with MP3 Player

2-way active PA speakers that are not only powerful but are also extremely portable. They incorporate a long throw woofer and an efficient compression driver to reproduce sound with excellent fidelity. The durable moulded enclosure is complemented with a tough metal grille that protects the drivers. They feature 3 channels with balanced XLR microphone inputs and 1/4" unbalanced inputs, RCA inputs for CD player or other auxiliary audio source connection. If you want to play MP3 tracks, there's an SD card slot and a USB port to take flash drives or any other compatible device and an MP3 controller with track readout and play, pause and track skip controls. Ideal for DJ, PA for schools, sports, churches, weddings, conferences etc.

- Titanium tweeterSD card and USB inputs

DIGITECH

- · MP3 controller
- 2 band equaliser
- Line level RCA inputs
- Tough moulded enclosure
 Balanced and unbalanced line outs
- **200W 12" VERSION**

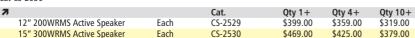
Specifications	
Power Output	200WRMS
Dimensions	620(H) x 400(W) x 400(D)mm
Weight	17kg

Cat CS-2529

300W 15" VERSION

Specifications	
Power Output	300WRMS
Dimensions	690(H) x 460(W) x 400(D)mm
Weight	23kg

Cat CS-2530











PA & Party Speakers & Accessories

PA SPEAKERS SETUPS

50W Portable Rechargeable Speaker with Amplifier

Small, light and compact, this portable rechargeable speaker is perfect for parties, the beach, schools, auditoriums or a street performance. Simple and easy to use, simply beach, schools, adultofulms of a steet performance. Simple aim easy to use, simply plug in your iPod®, CD player, MP3 player or microphone and you're ready to go. It includes rechargeable batteries with a runtime of about 12 hours so you can set it up in a flash and keep it running for the duration of the performance. The unit includes a wireless hand-held microphone and a wireless transmitter for lapel and lavalier microphone attachment.

- 50 WRMS output
- Battery powered with built-in rechargeable battery
 Included 3 wireless mics: Hand, lapel and headset
- 12 hours runtime
- Bass reflex enclosure
- 3 Channel mixer with tone control on master
- Adjustable talkover for microphone priority
- Made with 12mm wood and carpet
- 6.5" customized coaxial woofer
- 35mm pole mount for installation

- Weight: 8kg
 Nylon Carry Bag to suit Cat CS-2511
 Dimensions: 264(W) x 273(H) x 264(D)mm





7	Cat.	Qty 1+	Qty 4+	Qty 10+	
Speaker with Amplifier	CS-2513	\$299.00	\$269.00	\$239.00	
Nylon Carry Bag	CS-2511	\$29.95	\$26.90	\$23.70	

PUBLIC ADDRESS SPEAKER SPARES

Replacement Tweeter for CS-2516

Replacement piezo horn tweeter for CS-2516 Foldback Speaker,

or could be used for any appli	cation. No crossover re
Specifications	
	RMS
Nominal impedance 8 oh	ms
	18kHz
Sensitivity 1050	dB SPL @ 1W 1m

2.2 - 18kHz			
105dB SPL @ 1W 1m			
Cat.	Qty 1+	Qty 4+	Qty 10+
CT-2511	\$7.95	\$6.95	\$6.25
	105dB SPL @ 1W 1m Cat.	105dB SPL @ 1W 1m	105dB SPL @ 1W 1m Cat. Qty 1+ Qty 4+

8" Twincone 8 Ohm PA Speaker

This 200mm driver has a black cardboard cone, high efficiency and is ideal as an extension speaker or low level sound reinforcement. No box volumes given as this driver would mainly be used as a ceiling extension speaker. It also has mounting holes for a line transformer.

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Specifications for a typical S	ealed Box A	Application			
Box volume (litres):	19.08 Litres	S			_
-3dB frequency (Hz):	54Hz			1815	R
Inside cabinet dimensions:	220(W) x 3	20(D) x 270(H)r	nm	WARRAN	
Nom impedance:	8 ohms				
Power handling:	10WRMS				
Frequency range:	96Hz - 17k	Hz			
Sensitivity:	91dB 1Wat	t 1metre.		The second	
Voice coil resistance (Re):	7.2Ω				
Resonant frequency (fs):	96Hz	1000			
Mechanical Q factor (Qms):	10.53	6.0			370
Electrical Q factor (Qes):	3.00	-	-	1000 600	
Total Q factor (Qts):	2.341				
Equivalent volume (Vas):	19.2Litres		-	-	
Cone area (sq metres):	0.0213		-		
7 A B C	Dmm	Cat.	Qty 1+	Qty 4+	Qty 10+
206 195 180	75	CE-2325	\$19.95	\$17.70	\$15.70

2 x 70W Portable PA System with MP3 Playback

This is by far the best portable PA speaker system we have ever seen! A complete PA unit that consists of a 5 channel mixer, MP3 player and DSP effects. It has a pair of amplified 6.5" coaxial speakers pushing out a powerful 70WRMS per channel housed in a tough yet lightweight ABS Plastic. Whilst this unit has a truly comprehensive feature list, surely the best is the ability to pack the unit up in one minute courtesy of its special snap lock system.



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	CS-2548	\$499.00	\$449.00	\$399.00

PA Speaker Covers

Weight: 14kg Dimensions: Overall 550(W) x 310(H) x 215(D)mm

Protect your PA speaker investment, or keep the prying eyes of thieves away. Made from durable two-layer UV and water-resistant coated nylon, these covers will protect your speakers from the elements while being transported or from bumps and scrapes when in storage.

- CS-2500 Suits PA Speaker and Speaker/Amp CS-2514 or CS-2517
 CS-2501 Suits 12" Foldback Speaker CS-2516
- CS-2502 Suits 12" Subwoofer CS-2518

Note: Speaker not included.

7	Cat.	Qty 1+	Qty 4+	Qty 10+
PA Speaker and Speaker/Amp Cover	CS-2500	\$24.95	\$22.35	\$19.70
12" Foldback Speaker Cover	CS-2501	\$24.95	\$22.35	\$19.70
12" Subwoofer Cover	CS-2502	\$24.95	\$22.35	\$19.70

Tophat Adaptor 35 - 15mm

Adapts a 35mm tophat mount to 15mm.



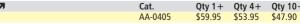
CW-2863

Roadies Cable Tester

Simply plug in the cable - the LED array gives you an instant go/no-go status of each conductor path. With bullet-proof allmetal construction, it's ideally suited to the ruff and tumble world of rock 'n' roll, but is also suitable for any technician working with cables. Faster and much easier than a multimeter. Requires 1 x 9V battery (use SB-2423)

Tests the following cables:

- Speakon 4, 8PDIN 3, 5, 7, 8P
- 1/4" mono & TRS • XLR 3, 5P • USB
- Phono (RCA) R145
- Dimensions: 190(L) x 98(W) x 35(H)mm





DJ EQUIPMENT

USB MIDI Mixer with Virtual DJ Software



Mix, play and scratch your own MP3 tracks directly from your PC. Now you don't need a pile of discs, a boatload of gear and a small truck, all you need is a half-decent computer and some MP3 tracks. The mixer gives you the control you lose when going from a traditional mixer to a laptop. It sends MIDI data from the controller to your DJ software without the inconvenience of mouse control. It's a fully class-compliant USB MIDI device and complete with Virtual DJ software. This is the ultimate tool for the performing DJ. The program has an easy-to-use interface and a large number of almost professional level options. Just load the folder with the songs to be played and they you can change the BPM, run loops, scratch, use effects, adjust the sound, and more.

Virtual DJ also adds different interfaces to suit everybody from the beginner to the professional DJ, the possibility to record your mixes to burn them on CDs, to broadcast on the Internet and have your own radio station, to save your CDs directly in MP3, to use a headphone to preview the songs or an external mixtable to perform in a club. The vinyl controls will let you scratch like on a real turntable, except that with the beatlock engine your scratches will never end out of the beat. The automatic seamless loop engine and the brand new synchronized sampler will let you perform astounding remixes live, with no preparation at all. The visual representation and the cues allow you to clearly see the song's structure, and never be surprised by a break anymore

- 2-deck controller
- Mix 2 files in 1 controller
- USB powered, no extra power needed
 Totally portable, smaller and lighter than a laptop
- 2 pro jog wheels
- Pitch, search and scratch
 3 faders: 1 cross fade, 1 volume per deck
- 6 EQ filters with 6 kills

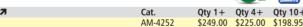
System requirements:
• Windows XP SP2 or Vista

- Pentium III or Athlon 1GHz 512MR RAM
- Dimensions: 358(W) x 260(H) x 45(D)mm









2 Channel Pro DJ Mixer

The ideal mixer to learn on. Two channels each with RCA inputs for CD or other line level source and a set of dedicated phono inputs. The BPM counter is capable of accurately measuring the beats per minute of almost any kind of dance music automatically. This function includes a digital indication that allows you to confirm the tempo of the current selection at a glance and takes the guesswork out of comparing the beats of different selections. This provides quick and easy beat matching, and then using the 2 band EQ on each channel you can seamlessly mix in the next track. The BPM counter works equally well when

monitoring a CD player and other digital sources or analogue sources such as a turntable.

- · Level meters on each channel
- 2 band EQ on each channel
- Phono and line level inputsMic and headphone outputs
- Effects loop
- Line level preamp outputsSelectable CF curve
- Dimensions: 330(W) x 22(H) x 102(D)mm



8 Channel Compact Mixing Console with Digital Effects

Not everyone needs a large multi-channel mixer; what everyone does need is usable features on any mixer. This is a compact mixer jam-packed with features. Including high and low impedance mic inputs, separate EQ, gain and pan controls for each channel, aux send and return for effects, recording outputs and phantom power.

It also has digital effects with hall and room simulators, chorus, flanger, two delays and a rotary speaker effect to simulate the classic sound of a Leslie or B3. The ideal small mixer for home recording, small PA systems, etc.

- · Four mono channels with high & low impedance inputs
- 2-band EQ on all mono channels
- Low-cut filter: 80Hz, 18dB/oct
- Gain, aux send, pan & effect controls
- 2 stereo channels LED master level indicator
- Phantom power (48V) · Headphone output with
- separate level control
- Sturdy metal construction
 Digital effects:
- 8 x hall and room effects
- Chorus, flanger, delayRotary speaker (Leslie, B3 etc)

Specifications	
Mic input	-55dB to -10dB
Line input	-10dB to -33dB
Stereo input	-14 to +10dB
Main out	max 20dB
Aux input impedance	10k ohm
Frequency response	20Hz - 20kHz
T.H.D	< 0.03%@1kHz
S/N ratio	>90dB
Power supply	17VAC x 2@350mA
Dimensions	270(W) 270(H) x 50(D)mm





AM-4204 \$249.00 \$225.00 \$198.95

LED XLR Gooseneck Mixing Desk Light

No DJ or engineer should be without one of these. It plugs into any XLR microphone socket with phantom power and provides enough light to see what you're doing without disturbing the audience. A single light will easily give enough of an even spread of light for about 12 channels on a mixing console. The gooseneck is very solid and of course, being LED, you want have to worry about replacement globes



Runs on phantom power395(L)mm



Note: Mixing console not supplied

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	AM-4124	\$24.95	\$22.35	\$19.70

DJ MIXING & SKILLS GUIDE



DJ Skills Mixing and Scratching Guide

Explores the history of the DJ from the radio jock to the hip-hop, rave and club generation, and the influence of jazz and other music forms on the modern DJ.

- It also covers tools of the trade ie
- Turntables
- Hard disks
- Drum machines
- · Effects, mixers
- as well as the skills to become a working DJ.
- Softcover, 282 pages, 240 x 190mm.

7	Cat.	Qty 1+	
	BA-1445	\$44.95	

Amp Modules & Wireless Mic System

PA ACCESSORIES

Passive Direct Injection Box

One of the most useful and versatile audio tools available, this DI Box is indispensable in providing easy interfacing and connection between a variety of audio equipment in many applications. Perfect for permanent live sound installations club, church and practice PA systems, monitor systems, home and project recording studios, karaoke and DJ sound systems. Rugged, roadworthy, all-steel construction will give years of continuous reliability.

Specifications	
Input Attenuation	-0, -20, -40dB
Instrument Input	50kΩ unbalanced
Parallel Out	50kΩ unbalanced
Balanced Output	600Ω
Ground Lift	Switchable
Dimensions	120(W) x 76(D) x 45(H)mm



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-0402	\$24.95	\$22.35	\$19.70

PA / DJ 19" RACK

PA / DJ Mobile 19" Rack Frame

With a total of 18 units available, you'll be able to fit all your rack gear and keep it completely portable. Ideal for DJs, PA techs, sound engineers or guitarists with large rack setups

The top section can be rotated through a range of 45° for maximum flexibility.

6mm screws and captive nuts

Sturdy steel construction with

• Dimensions: 530(W) x 1050(H) x 500(D)mm

> Note: Rack mounted equipment not included



HB-6348 \$79.00 \$70.95 \$62.95	7	Cat.	Qty 1+	Qty 4+	Qty 10+
		HB-6348	\$79.00	\$70.95	\$62.95

AMPLIFIER MODULES

Class-T Digital Audio Amplifier Module

This PCB amplifier module is ideal for any audio enthusiast that enjoys building and modifying speaker systems. It is designed around the Tripath TA-2024 IC which is a 15W per channel continuous average two-channel IC. The applications are virtually limitless since this tiny PCB measures at a mere 68 x 32mm. Build your own speakers or incorporate the amplifier into an existing speaker cabinet.

- Recommended power supply:
- Regulated 12VDC 2000mA Dimensions: 68(L) x 32(W)mm

Package contents:

- Class T Digital Audio Amplifier PCB
- Volume control PCB with 12" ribbon cable LED power indicator

- 12" Speaker wires (Red & Black) 12" Power weirs (1 Red & 1 Black)
- 2 x Ferrite cores

2 / Output capacitors				
7	Cat.	Qty 1+	Qty 2+	Qty 4+
	AA-0228	\$29.95	\$26.90	\$23.70

All units require further

assembly, power supply etc.

Universal Preamplifier Module - 1 Channel

For microphones and diverse uses. This mini-module is simply connected between a power amplifier and a weak signal source (e.g. microphone)

Specifications	
Operating voltage	9 to 24 VDC
Frequency response	10Hz to 100kHz
Input	2 - 50 mV
Output	200 mV - 1 V
Dimensions	30 x 25 x 15 mm

7	Cat.	Qty 1+	Qty 2+	Qty 4+
	AA-0220	\$17.95	\$15.95	\$14.35

Universal Amplifier Modules - 1 Channel

Ideal as a bench-test amplifier for audio sources, or even as a mono headphone amplifier, this small audio amplifier can be operated from 4.5V up to 12VDC. Use two for stereo.

These small audio amplifier modules are suitable for a number of purposes. Modules available in 12W and 40W versions and have a range of suitable input voltages and load impedances The 40W module is a bridge-mode amplifier, so the speaker it is connected to can not have an earthed terminal.

			1.
Specifications	AA-0223 - 3.5 Watt	AA-0225 - 12 Watt	AA-0227 - 40 Watt
Output power	3.5 W (max)	12W (max) into 4-16Ω	40W (max) into 4-8Ω
Operating voltage	4.5 to 12 V	6V - 16V, 800mA (max)	6V -16V, 4A (max)
Speaker impedance	4-16 ohm	-	-
Input sensitivity	< 80 mV	80mV	500mV
Frequency response	40Hz-20kHz	40Hz-20kHz	20Hz-25kHz
Dimensions	30 x 25 x 15 mm	62 x 36 x 23 mm	62 x 36 x 23 mm

<i>n</i>	Cat.	Qty I +	Qty 2+	Qty 4+	
3.5 Watt	AA-0223	\$17.95	\$15.95	\$14.35	
12 Watt	AA-0225	\$23.95	\$21.35	\$18.95	
40 Watt	AA-0227	\$44.95	\$40.45	\$35.90	

WIRELESS MICROPHONE SYSTEMS

Economy VHF Dual Channel Wireless Microphone System

An economical wireless VHF microphone system with enhanced signal reception. Ideal for performers on the go, churches, halls etc. Includes 2 microphones, 1 wireless receiver and plugpack. Microphones require 2 x 9V batteries (not included).

- High-precision quartz crystal locked frequency
 Power and low battery LEDs
 Power and mute switches

- 12 hour battery lifeUp to 80m range
- Power antenna & transmitter peak LEDs
 Volume control / 1/4" output
- · Noise squelch circuitry

Additional microphones sold separately Lavalier Beltpack: Channel A Cat AM-4057 / Channel B Cat AM-4059

Cu	I. AIVI 4033		supplied		WARRANTU	
7		Cat.	Qty 1+	Qty 4+	Qty 10+	
	VHF Wireless System	AM-4071	\$69.00	\$61.95	\$54.95	
	Lavalier Mic - Channel A	AM-4057	\$29.95	\$26.90	\$23.70	
	Lavalier Mic - Channel B	AM-4059	\$29.95	\$26.90	\$23.70	

Specifications Dynamic range

Frequency response

Receiver power supply

Signal-to-Noise ratio

Audio output
Adjacent-chl interference ratio

2 mics

Frequency range









>90dB

60Hz-15kHz

0-200mV mixed > 80dB

12VDC 350mA

>85dB

173.29375 - 174MHz

195(L) x 145(W) x 42(H)mm

WIRELESS MICROPHONE SYSTEMS (CONTINUED)

Economy UHF Dual Channel Wireless Microphone System



This wireless microphone system features two separate channels, one for each microphone. Output is either via separate balanced XLR socket, one for each channel, or via an unbalanced line with the two channels mixed. The system includes 2 microphones and batteries, receiver unit, 14VDC plugpack and one metre 6.5 mono plug to 6.5 mono plug lead. Ideal for schools, churches, karaoke, weddings etc.

Qty 1+

\$149.00

\$49.95

Spare microphones listed on this page are for replacement or substitution of original microphones. Any attempt to operate more than one microphone on each channel will only result in interference on all microphones.

\$118.95

\$39.90

\$39.90

Qty 4+

\$133.95

\$44.90

Specifications	
Power supply	14VDC
Modulation	FM
Channels	2
Transmitter	
Frequency range	740 - 820MHz
Power	30mW
Maximum modulation	±15kHz
Range	60m
Batteries	4 x AA included
Receiver	
Frequency response	40Hz - 18kHz
Frequency stability	±0.05%
Power	4W
S/N ratio	>98dB
Dimensions	210(L) x 170(W)
טווווכווזוטווז	x 42(D)mm

F	Professional UHF Dual C	hannel \	Wireles	s Microphone	System
	Spare Wireless Mic - Channel B	AM-4063	NEW	\$49.95	\$44.90

AM-4078

AM-4061

Inexpensive dual channel UHF wireless microphone setup that is not short on features. This system offers the superior performance and convenience found on more expensive models in the market. Incorporates easy to use infra-red pairing for microphones, wireless transmission can reach up to 100m line of sight. Suitable for school, churches, karaoke, weddings etc. Output is either via separate balanced XLR socket, one for each channel, or via an unbalanced line with the two channels mixed.

• Budget non-diversity receiver

UHF Wireless System

Spare Wireless Mic - Channel A

- 2 channel
- 16 frequencies per channel2 mics included

Additional microphones sold separately
Wireless Handheld Mic: Channel A Cat. AM-4123 Channel B Cat. AM-4126

Wireless Beltpack: Channel A Cat. AM-4065 Channel B Cat. AM-4066

Specifications	4.0/0.6.200
Power supply	14VDC 300mA
Modulation	FM
Channels	2
Batteries	4 x AA included
Transmitter	
Frequency range	770 - 800MHz
Power	30mW
Maximum modulation	±25kHz
Range	>100m
Receiver	
Frequency response	40Hz - 18kHz
Frequency stability	±0.05%
Channel rejection	>80dB
S/N ratio	>98dB
Dimensions	420(L) x 210(W) x 42(D)mm



			(PRICE	AIVI-4005	
7	Cat.	Qty 1+	Qty 4+	Qty 10+		
UHF Wireless System	AM-4122	\$249.00	\$225.00	\$198.95	「響力	CETO I
Wireless Handheld Mic Ch A	AM-4123	\$119.00	\$106.95	\$94.95	Comment of the last of the las	Courses to
Wireless Handheld Mic Ch B	AM-4126 NEW	\$119.00	\$106.95	\$94.95		AM-4
Wireless Lapel Mic Ch A	AM-4065	\$99.00	\$88.95	\$78.95		THE REAL PROPERTY.
Wireless Lapel Mic Ch B	AM-4066	\$99.00	\$88.95	\$78.95		

Professional UHF Dual Diversity Wireless Micophone System



Additional microphones sold separately Wireless Handheld Mic: Channel A Cat. AM-4121

Channel B Cat. AM-4128 Channel A Cat. AM-4067

Wireless Lapel Mic:

Channel B Cat. AM-4069

Suitable for professional and stage use, this UHF diversity wireless microphone system features 16 user-selectable frequencies per channel with easy infrared pairing on each microphone to provide interference-free transmission. It also has phase locked loop (PLL) circuitry for frequency stability. Each channel has an LCD which displays the channel selection, frequency and signal strength. The channel is selected with the up/down buttons in the battery compartment. Output is either via separate balanced XLR line for each channel, or via an unbalanced 6.5mm mono line with the two channels signals mixed.

• The system includes 2 microphones with batteries and receiver unit in 19" rack-mount chassis.

Specifications	
Power supply	12VDC, 1.2A
Modulation	FM
Channels	2

Transmitter Transmitter		
requency range		770 - 800MHz
Power		30mW
Maximum modulatio	n	±15kHz
Range		>100m
Batteries		4 x AA (included)
Receiver		
requency response	40Hz -	· 20kHz
requency stability	±0.05	5%
Channel rejection	>80d	В
/N ratio	>90d	
Dimensions	420(L)	x 210(W) x 45(D)mm



	JEAR WARRANTY
ty	10+
27	9.00

					WARRANTY
7		Cat.	Qty 1+	Qty 4+	Qty 10+
	UHF Diversity Wireless System	AM-4120	\$349.00	\$315.00	\$279.00
	Wireless Handheld Mic Ch A	AM-4121	\$149.00	\$133.95	\$118.95
	Wireless Handheld Mic Ch B	AM-4128 NEV	N \$149.00	\$133.95	\$118.95
	Wireless Lapel Mic - Ch A	AM-4067	\$129.00	\$115.95	\$102.95
	Wireless Lapel Mic - Ch B	AM-4069	\$129.00	\$115.95	\$102.95

Freecall order hotline: 1800 022 888



MICROPHONES

Unidirectional Dynamic Microphone

Dynamic, unidirectional microphone with an anti-pop grille, built-in on/off switch, a plastic finish and a fixed 3 metre lead with 6.5mm plug.



Specifications		LIEAR		- Contract
Туре	Unidirectional dynamic	WARRANTY	4	AND THE REAL PROPERTY.
Frequency response	50Hz - 13kHz		STATE OF STREET	
Sensitivity	-50dB			
Output Impedance	600 ohm		1-11	
Termination	3 metre cable - 6.5mm plug			
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AM-4190	\$9.95	\$8.75	\$7.75



Dynamic Unidirectional Professional Microphone

With professional styling, it features a cardioid polar pattern for reduced background noise and feedback. This microphone is ideal for use in theatres, nightclubs, public address systems and recording. Excellent frequency response

and tough metal construction make this microphone great value. Supplied with a 6m cable to 6.5mm plug.



Termination	o mene cable, o.siiiii piug			
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AM 4000	\$20.0E	426 00	¢22.70

USB Dynamic Microphone

No batteries or phantom power, no audio interface and no drivers required. Plug and play with any recording software or the recording interface on your PC for superior sound quality on your next podcast or home recording masterwork.



Specifications.					
Туре	USB unidirectiona	l dynamic			
Polar pattern	Cardioid				
Impedance	600 Ohms				
Sensitivity	-73dB+/-3dB @1	kHz		DEU.	
Frequency response	80Hz - 16kHz			PRICE	LJEAR WARRENTY
Termination	3m cable, USB 2.0) plug		PRILE	WARRANTY
7		Cat.	Qty 1+	Qty 4+	Qty 10+
		AM-4103	\$29.95	\$26.90	\$23.70

Unidirectional Balanced Professional Vocal Dynamic Microphone

A top quality balanced mic suitable for singing and band work. Similar performance to those costing \$200 or more. Supplied with 3 pin Cannon lead and 6 metre cable. Case made of zinc-



	C-+	04.4.
Termination	6 metre cable, XLR	
Frequency response	40Hz - 17kHz	
Sensitivity	-76dB ±3dB @ 1kHz	
Impedance	500 Ohms	
Polar pattern	Cardioid	
Туре	Unidirectional, balanced dyna	mic
Specifications		



AM-4096 \$35.90

USB Microphone

Great for recording vocals or podcasting. This low cost USB uni-directional condenser microphone offers great performance and versatility. The pickup assembly rotates through 180 degrees for optimum efficiency. A 3.5mm jack is also provided for monitoring your work with headphones. Compatible with Windows XP, Vista, 7 & Mac OS10.4+.

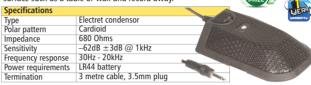
Specifications	
Туре	USB unidirectional
Polar pattern	Cardioid
Impedance	USB
Sensitivity	-56dB +/-3dB @1kHz
Frequency response	50Hz - 18kHz
Termination	USB 2.0 plug



Cat.	Qty 1+	Qty 4+	Qty 10+
AM-4104	\$19.95	\$17.70	\$15.70

Electret Condenser Boundary Microphone

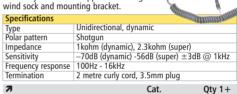
A great microphone working on the "Boundary Effect" principle. ice this microphone horizontally or vertically on a large flat surface such as a table or wall and record away.



71	Cat.	Qty 1+	Qty 4+	Qty 10+
	AM-4072	\$29.95	\$26.90	\$23.70

Shotgun Video Camcorder Microphone

This electret condenser high quality slimline microphone is designed to pick up sound from a long distance away, as well as (with the flick of a switch) close up. The super cardioid polar pattern is designed for video camera use, combining high sensitivity with extremely low noise. Supplied with large





\$35.90

Unidirectional Gooseneck	Micropho	ne
	AM-4085	\$39.95

Capture your audience in any public forum with this professional lectern microphone. Its wide, flat frequency response ensures your speeches sound the way they were intended. The cardioid pickup pattern minimises those annoying noises from nearby speakers and monitors.



\$31.90

Requires 9 - 52VDC phantom power.

Specifications	
Туре	Unidirectional
Polar pattern	Cardioid
Impedance	250 Ohms
Sensitivity	-58dB
Frequency Response	100Hz - 16kHz
Low frequency cutoff switch	
Termination	XLR



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AM-4073	\$79.95	\$71.95	\$63.95

Microphone Intercom Speaker

Designed for box office style communication through protective glass such as ticket booths, bank counters, reception desks, or nightclub entry points. It features an adjustable gooseneck and volume adjustable rotary button at the base.

Specifications			1	acill
Frequency Range	150 - 260MHz		(4)	
RF power output	10mW (max.)		**	2012
Oscillator	Crystal locked control			
Frequency stability	< 0.005%			
Maximum Deviation	<15KHz with limiting compressor			
Spurious Emission	> 50dB below carrier frequency			GEAR
T.H.D	< 1% (at 1KHz)		- 1	WARRANTY
Battery	Requires 2 x AA batteries		_ 1	
Microphone Unit	Uni-directional electret condenser	4		
LED Indicator	Power, ON-OFF and Low battery		1	
Current Consumption	5mA-35mA			
Dimensions	98(H)x66(W)x25(D)mm			
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-4089	\$99.00	\$88.95	\$78.95

\$19.95

MICROPHONES (CONTINUED)

Tie Clasp Microphone

Electret condenser tie clasp microphone. Supplied with alligator clip to attach to tie or shirt and 2 metres of cable to 3.5mm plug.

7	Cat.	Qty 1+ Qty 4+ Qty 10+
Termination	2 metre cable, 3.5mm plug	
Frequency response	20Hz - 16kHz	
Sensitivity	-67dB ±3dB @ 1kHz	
Impedance	2.2kohm	THE STATE OF THE S
Polar pattern	Cardioid	IIIII
Туре	Electret condensor, tieclasp	
Specifications		
• Ideal for lectures, s	tage, video recorders etc.	

AM-4092

Mic and Control for iPhone®

Now you can listen to music on your iPhone® through your headphones without having to fiddle with the screen. Simply connect this adaptor to both your iPhone® and headphones and listen away. Someone calls during a song? That's ok! with its built in mic, you can answer your call without even having to take your headphones off! Simply click to answer your call or to play/pause the music. Too easy! Features In line microphone and phone call control, music playback and a 3mm headphone jack.



\$17.70

\$15.70

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2098	\$12.95	\$11.35	\$10.35

Tie Clasp Condenser Microphone

With excellent sensitivity and low noise, this is the ideal add-on microphone for your digital voice recorder or other portable recording device that only has a tiny built-in microphone. It's very light and unobtrusive, so is ideal for recording interviews, conferences or webcasts.

. Output is to 3.5mm plug

Cable length 1200		-				
Specifications						
Туре	Condensor, tieclasp		,			
Polar pattern	Cardioid					
Impedance	2.2kohms			NAC STATE		
Sensitivity	-66dB ±3dB @ 1kHz		21		1	
Frequency response	50Hz - 20kHz				N.	PRIC
Termination	1.2 metre cable, 6.5mm plug				1	
_				•		

(1)			Cdl.	Qty I+	Ųιy 4∓	Qty It	
			AM-4101	\$19.95	\$17.70	\$15.70	

Stereo Tie Clasp Microphone

A handy accessory for stereo digital voice recorders or recording in stereo on your laptop. Independent left and right microphones for true stereo. Suitable for recording conferences, music etc.

Specifications	
Туре	Unidirectional stereo
Polar pattern	Cardioid
Impedance	2kohms
Frequency response	20Hz - 16kHz
Sensitivity	-68dB +/-3dB @ 1kHz
Termination	1m lead, 3.5mm stereo plug



termination	rm lead, 3.5mm stereo plug	_			
7	Cat.	Qty 1+	Qty 4+	Qty 10+	
	AM-4106	\$24.95	\$22.35	\$19.70	

MICROPHONE ACCESSORIES

Boom Microphone Stand

Height adjustable with a boom that extends 600mm, so is suitable for vocals, overheads or micing up drum kits or pianos. Mic holder with 5/8" adaptor included.

- · Steel construction
- Folds up to 850mm long



			•	
71	Cat.	Qty 1+	Qty 4+	Qty 10+
	AM-4113	\$34.95	\$31.45	\$27.90

Desk Top Mic Stand

Designed for applications where you don't need a full-size mic stand, such as receptions, conferences, webcasts etc. The build quality is excellent with diecast aluminium legs, steel column and padded feet.

- Adjustable up to a height of 200mm and folds up to 240mm long
 • Includes mic holder with 5/8" adaptor

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a	Cat.	Qty 1+	Qty 4+	Qty 10+
	AM-4111	\$17.95	\$15.95	\$14.35

Desk Stand With Mic Holder

If you want to place a microphone on a desk or table, this holder will do the job nicely. It features a tripod stand that folds away for quick storage, and rubber grips to prevent slippage. The mic holder screws onto a short stand that extends out from the tripod itself. A thumb screw holds the extended shaft firmly in position.

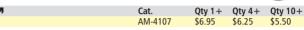
- Ideal for DJs, students, clubs, etc.
 Fully extended, it measures approximately 250(H) x 220(D)mm.

			-	
71	Cat.	Qty 1+	Qty 4+	Qty 10+
	AM-4110	\$6.95	\$6.25	\$5.50

Expanding Microphone Holder

Accepts standard 22mm tapered microphones and will expand to accommodate larger diameter mics.

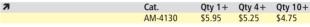
- Fitted with a 5/8" x 27 thread
- Black in colour



Gooseneck Mounting Base

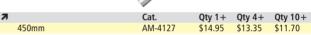
With 5/8" thread. Surface mountable for microphone & goosenecks

- Solid metal construction with mounting screws
- Size 44mm base dia



Flexible Gooseneck

- 450mm long
- 5/8" male to 5/8" female fittings



Microphone Inserts

Replacement electret mic inserts for tape recorders, etc.

MINI MICROPHONE INSERT

Omnidirectional mini mic insert. Ideal for all those miniature circuits.

- Dimensions: 6mm diameterOperating Voltage 1.5 to 10VDC
- Current Consuption 0.8mA or less (6V supply)
 Frequency Range 50 12,500Hz
 Output Impedance same as load
- resistance (150 5k Ω) Sensitivity -69dB \pm 3dB
- S/N Ratio More than 56dB
- Dimensions: 6mm x 3.5mm dia

STANDARD MICROPHONE INSERT Replacement electret mic inserts for tape

recorders, etc. Operates from a single 1.5V battery
10mm diameter. 50Hz - 15kHz

- Sensitivity -69dB. Used by OEM's
- Dimensions: 6.5mm x 9.5mm dia



PC mount electret mic insert

- Operates from a single 1.5V battery9.7mm dia x 6.5mm high
- 50Hz 15kHz
- Sensitivity -69dB
 Includes PC mount pins 11mm long

Description	Size(Dia x Hmm)	Cat.	Qty 1+	Qty 4+	Qty 10+
Mini	6 x 3.5	AM-4008	\$2.65	\$2.30	\$2.07
Standard	6.5 x 9.5	AM-4010	\$2.35	\$2.09	\$1.85
Standard with Pins	9.7 x 6.5	AM-4011	\$2.35	\$2.09	\$1.85

TECH TIF Electret microphones work on the same principle as

a capacitor, except that one 'plate' is fixed and the other is allowed to move in sympathy to sounds. The tiny change in capacitance is transformed to a signal via an op-amp IC embedded into the condenser microphone casing. As the IC needs a small amount

- GROUND

- GROUND 6.5 +/-0.5

9.7 +/-0.1

6.5 +/-0.5

1

PARTY LIGHTING - MANUAL CONTROL

3W CREE® LED Mini Spotlight

These ultra compact mini LED spotlights offer a super bright precision beam. Ideal for fixed lighting applications in retail stores, art halls or museums to illuminate and decorate. The mounting bracket makes these units also suitable for stage lighting at parties or used on a rotating mirror ball. A truly versatile and cost effective







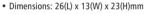




7	Cat.	Qty 1+	Qty 5+	Qty 10+
White	SL-3470	\$34.95	\$31.45	\$27.90
Blue	SL-3471	\$34.95	\$31.45	\$27.90

Rotating Disco Ball with LED Spotlights

Create an amazing light show by hanging these lights on the ceiling to get the desired mood on your next party. Turn on and dance the night away with this brilliant mirror ball and LED spotlights station. It features an automatic rotating mirror ball, two adjustable angle spotlights with 6 red, green and blue LEDs each. It also has an additional 4 red and blue LEDs on the base for maximum effect. Mains power adaptor included.



7	Cat.	Qty 1+	Qty 5+	Qty 10+
	SL-2916	\$39.95	\$35.90	\$31.90

Party Light Set

Liven up your next party with this professional lighting set. Containing everything you need to create your own dance party setup, this kit contains a 20cm (8") mirror ball with a 240V AC, 1 RPM motor to run it, pinspot light and stand, PAR 36 bulb and 4 different coloured filters (red, amber, green and blue). Easy to operate, this kit will make your next party sensational



- 20cm (8") mirror ball
 Mirror ball motor (240VAC) 1 RPM
- PAR 36 spotlight (240VAC)
 PAR 36 spotlight (6V)
- 4 x coloured filters for spotlight (colours: red, amber, green and blue)

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	SL-2978	\$84.95	\$76.50	\$67.95

Red & Green Mini Laser Show

Basic economy model provides red and green twinkle laser light display. Sound activated, auto or remote control with variable modulation. Manually controlled only

- Control mode: Sound active, auto, remote control
 Mains operated from 9-12VDC plug pack (included)
 Dimensions: 270(L) x 215(W) x 115(H)mm







LED Linkable Party Lights with Controller

Turn a lifeless party into an exciting one with these linkable blue, amber and red LED party lights. They have a built-in sound modulator that allows for the lights to switch in time with the beat. Microphone sensitivity and light chaser speed functions are fully adjustable. Units are mains powered, easy to operate and designed to last. Two models available:

 3 LED LINKABLE PARTY LIGHT SET
 Dimensions: 14(L) x 13(W) x 48(H)mm Cat. SL-2911

6 LED LINKABLE PARTY LIGHT SET
• Dimensions: 35(L) x 13(W) x 36(H)mm

Cat. SL-2913





7	Cat.	Qty 1+	Qty 5+	Qty 10+
3 LED Set	SL-2911	\$49.95	\$44.90	\$39.90
6 LED Set	SL-2913	\$79.95	\$71.95	\$63.95

4 Colour Light Chaser - Sound Modulated

This light chaser uses a simple, but very effective design. It has a built in sound modulator which flashes the lights in tune with the beat. It is a mains powered unit, housed in a strong metal case. The four globes are switched on and off sequentially. The speed is controlled by an internal sound modulator, with a small microphone built-in to detect the music. It measures

435(W) x 105(H) x 185(D)mm, includes a mounting bracket, and 800mm mains lead. It uses 240V 60W ES reflector lamps, and is supplied with a red, yellow, green, and

blue globe.

Spare globes: Orange Cat. SL-2953 Cat \$1-2954 Purple Red Cat. SL-2955 Green Cat. SL-2956 Cat. SL-2957 Blue

Cat. SL-2958



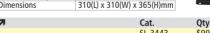


2	71	Cat.	Qty 1+	Qty 5+	Qty 10+
	Chaser	SL-2942	\$79.95	\$71.95	\$63.95
	Spare Globes - all colours - each	ALL	\$9.95	\$8.75	\$7.75

10W RGB DMX LED Star Ball

A compact and more effective alternative to a standard Mirror Ball system. It has a powerful 10W Red, green and Blue LED which creates amazing visuals and lighting effect. This LED star ball can be roof or desk mounted, watch as lights swirl and change colours with the beat of the music. It can also be connected to a DMX512 light controller. Great for club, night clubs, bars,

DJ's etc.	
Specifications	
Mains supply	240VAC
Power consumption	25W
Dimensions	310(L) x 310(W) x 365(H)i







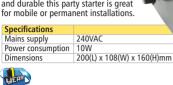




PARTY LIGHTING - MANUAL CONTROL (CONTINUED)

RGB LED Rotating Disco Light

A compact sound activated RGB LED party light that will help to create a fantastic atmosphere for any special event or occasions. It can be operated automatically to create very bright coloured patterns in red, green and blue with 61 LEDs. Highly portable and durable this party starter is great





Cat. Qty 1+ Qty 5+ Qty 10+ \$71.95

LASER LIGHTS & SPOTLIGHTS - DMX CONTROLLED

Laser Light Shows

Whether staging a dance club, house party, full pro DJ setup or stage production, laser light projectors help create the perfect atmosphere. They produce truly spectacular lighting effects with hundreds of twinkling and constantly moving laser lights. Change directions, speed, rotation and colours. You can control each unit manually or via a DMX controller for full automation. Each comes with mounting bracket for fixed rigging, but these lightweight and compact laser projectors are also suitable for portable lighting setups. Combine with a fog machine for the complete stage effect.

TWINKLE DMX LASER SHOWS

Add DMX control for full automation. Either of these would be a worthwhile addition to a DJ, stage or production setup. Single colour red or green models available

- High speed step motor drive and
- grating scanMains poweredControl mode: Sound active and master/slave
- Modulation: 0-20kHz
- Dimensions: 205(L) x 80(W) x 145(H)mm

RED TWINKLE LASER SHOW CAT. SL-3431 GREEN TWINKLE LASER SHOW CAT. SL-3433







The wall & ceiling shots of the laser patterns do not do these products justice. In real life they are spectacular!

RED AND GREEN TWINKLE LASER SHOW WITH BLUE WATERFALL FEATURE

DMX control, red and green twinkle displays along with spectacular high power blue LED waterfall effect. Adjustable dimmer, rotation speed and stroboscopic function.

- Key protection safety function
- Brightness adjustmentScattering function
- Mains powered
- Dimensions: 200(L) x 85(W) x 158(H)mm Cat. SL-3437







7		Cat.	Qty 1+	Qty 5+	Qty 10+
	Red Twinkle Laser Light Show	SL-3431	\$119.00	\$106.95	\$94.95
	Green Twinkle Laser Light Show	SL-3433	\$149.00	\$133.95	\$118.95
	Red & Green DMX Twinkle	SL-3437	\$299.00	\$269.00	\$239.00

Par 64 5 Channel 94 LED DMX Spotlight

This LED Par light is equipped with up to 5 channels of DMX controls. It offers complete control over your stage, party or DJ lighting setup. Unit features bright red, green and blue LEDs which can produce a wide range of colour effects. Designed for easy installation, safe, energy efficient and long life operation. 240V powered, individually addressable via DIP switch and include a mounting bracket.

- Never change a globe again!
- Channels: Red, green, blue, brightness, strobe
- Dimensions: 245(L) x 195(Dia)mm



Qty 5+ Qty 10+ \$99.00 \$88.95

12W DMX Revolving LED Light

A feature packed and extremely powerful revolving LED light that will not break the bank. This unit has advanced moonflower effects with high power 3W Red, 3W Green, 3W Blue and 3W White LEDs which offer colour changing and colour mixing beams. With 7 Channel DMX 512 programming or linking capabilities, built-in sound modulator, a step motor for smooth movement and strobe speed



- Master/Slave or DMX-512
- Mains Powered
- Dimensions: 216(W) x 196(H) x 135(D) mm





SL-2899



Green DMX Laser Show

Applying the latest technology, this laser projector is ideal for bars, clubs, house parties or family functions It produces over 100 green patterns with sound activation or DMX master/slave control.

- Sound and power active indicator
- Safety functionSensitivity adjustment
- · Mains powered



Specifications	
Control Mode	Sound active, automatic, DMX512 (7 channels), master/slave
Modulation	0-20kHz
Power rating	20W
Dimensions	205(L) x 80(W) x 145(H)mm



Qty 10+ \$169.00 \$151.95

3W RGB LED Spotlight - PAR 64

A compact and lightweight par 64 addition to your stage or lighting setup that uses 36 x 3 watt LEDs and very low power consumption. The RGB colour mix is produced using a combination of 12 red, 12 green and 12 blue LEDs. It can be controlled by any DMX controller or will also function in stand alone mode, offering a great range of colour mixing possibilities for various lighting effects. Features very easy to use menu system with auto run, sound or DMX 512 master/slave control.

Specifications	
Mains Supply	240VAC
Power consumption	120W
Dimensions	255(L) x 255(W) x 365(H)mm
	Cat

SL-3421

\$199.00 \$178.95 \$158.95

Party Lighting – DMX Controlled

LASER LIGHTS & SPOTLIGHTS - DMX CONTROLLED (CONTINUED)

1W RGB LED IP65 Spotlight - PAR 64

A fantastic IP65 rated weatherproof PAR 64 stage light suitable for indoor or outdoor set ups. Low power and lightweight, it has a built in temperature control system to prevent the high powered 36 x 1 watt LEDs (12 red, 12 high powered 36 x 1 Walt LEDS (12 reu, green and 12 blue) from over heating. It can be set to display automatically preset programs or interfaced to a DMX controller for full lighting control. Great for stage lighting, parties or dj set ups.

- Mains supply: 240VAC
- Power consumption: 45W
 Waterproof rate: IP65
- Dimensions: 235(L) x

165(W) x 300(H)mm				WARRANTU
7	Cat.	Qty 1+	Qty 5+	Qty 10+
	\$1-3468	\$269.00	\$245.00	\$219.00

DMX LED Moving Head Spotlight

A cost effective 15W RGBW LED moving head spotlight. This unit is extremely compact and lightweight but is extremely big on features. Integrates a user selectable 540 degree pan and 270 degree tilt, it has 9 gobos plus open and wheel spin effect. With 14 DMX channels, it features variable electronic strobe and dimmer functions. Built-in movement macros via master/slave or DMX. With its built in fan cooler and long life RGBW LED, this unit is built to last with up to 50,000 hours of service. Great for stage lighting, club and party applications.

- Fan Cooled
- Variable Electronic Strobe
- Variable Electronic Dimmer
 Pan/Tilt Invert Option
- · Vector speed channel for pan/tilt
- Built-in movement macros







Specifications	
Mains Supply	240VAC
Power Consumption	50W
Measures	249(H) x 173(W) x 173(D)mm

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	SL-3440	\$349.00	\$315.00	\$279.00

Multicoloured LED Party or Stage Lighting Kit with Stand & Controller

Liven up your next party or stage performance with this slim line stage lighting kit, which features 4 extremely thin LED PAR lights with a stand truss extendable up to 1.8m, 3 modes of operation including DMX, Master/Slave and sound activation, RGB colour mixing and advanced LED technology. Each PAR CAN unit has 145 bright red, green and blue LEDs, and are fully adjustable for wide area projection for large areas. Control manually using the supplied foot controller or by the 13 channel DMX control compatibility, making it suitable for professional or stage applications. Includes a light and stand carry bag so it can all be neatly packed away for easy transportation. Perfect lighting equipment for mobile entertainment purposes.

- 145 LEDs per PAR CAN
- DMX Channel: 13
- 3 modes of operation: DMX, Master/Slave and sound active
- Power supply: 240V 50Hz
- Power consumption: 120W

Dimensions

- Folding truss size: 1.2m wide
- Stand: Extends from 1.2m up to 1.8m
 Light carry bag: 700(L) x 390(W) x 200(H)mm
- Stand carry bag: 1.2m long



Prices	in	Australian	Dollars

Want it fast? How about next day delivery? See page 4 for details.

Qty 1+

\$399.00

SL-3467

Animation Green Laser Show with ILDA

ILDA (International Laser Display Association) capability enables full software integration and complex animation of your laser show. The unit comes with pre-programmed displays and characters, but with the use of ILDA software such as Zion, Millennium or V3D

you can add PC control to create cartoon, letters, figures or other characters. It also has DMX control capability so is suitable for the professional or stage application. Software is not included

- ILDA software or DMX control
- automatic

- 174(H)mm









Specifications	
Modulation	0-20kHz
Control Mode	Sound active, automatic, DMX (6 channels), master/slave
Power supply	AC 240V 50HZ
Dimensions	270(L) x 80(W) x 174(H)mm

Cat. Qty 1+ Qty 5+ Qty 10+ SL-3438 \$399.00 \$359.00 \$319.00

DID YOU KNOW...

James Clerk Maxwell (1831 - 1879)

A Scottish physicist and mathematician, his most prominent achievement was formulating classical electromagnetic theory. Maxwell's equations demonstrate that electricity, magnetism and light are all manifestations of the same phenomenon, namely the electromagnetic field. Subsequently, all

other classic laws or equations of these disciplines became simplified cases of Maxwell's equations. Maxwell's achievements concerning electromagnetism have been called the "second great unification in physics" after the first one realised by Sir Isaac Newton.



DMX CONTROLLERS

5 Channel DMX LED Light Controller

This compact 5 channel DMX LED light controller requires little set up and no programming necessary. It is fully compatible with our range of PAR spotlights, great for parties or stage lighting set ups. The controller allows you to create colourful scenes and amazing lighting effects. This unit is a good all round controller giving strobe and basic dimming effects. It also features six selectable modes with a combination of RGB colour mixing, fading, chasing and sound control.



- 5 channels9VDC plugpack included
- Power consumption: 4.5W
- Weight: 1.5kg
 Dimensions: 252(L) x 122(W) x 46(H)mm



7	Cat.	Qty 1+	Qty 5+	Qty 10+
	SL-3423	\$89.95	\$80.95	\$71.95

19" Rack Mount DMX Controller



devices, such as lights, dimmers, fog machines or laser shows with programmable sequences or scenes. For each scene you can program multiple parameters like fade, pan, strobe, colour etc. limited only by the capabilities of the actual DMX devices being controlled; save and play back each scene in the sequence your production requires. Rack-mountable and mains powered. See the Primers section of our website for more DMX information and programming tips.

- Control up to 12 devices
- 16 channels per device
 Standard 19" rack mount
- 3U rack space 9V plugpack included
- Dimensions: 482(W) x 133(H) x 70(D)mm



7	Cat.	Qty 1+	Qty 5+	Qty 10+
	SL-3429	\$149.00	\$133.95	\$118.95

DO A FRIEND A FAVOUR

If you have a technical friend or someone who may be just interested in some of the products we stock. simply mail or email his or her address to:

Catalogue Department Jaycar Electronics: PO Box 107 Rydalmere, NSW 2116 or email to catalogue@jaycar.com



DID YOU KNOW...

Karlheinz Brandenburg (1954 -)

In 1989, his research formed the basis of MPEG-1 Layer 3 (MP3), MPEG-2 Advanced Audio Coding (AAC) and most other modern audio compression schemes - the MP3 Player arrives!

BUILD-IT YOURSELF DMX CONTROLLERS

DMX Controller USB Interface Kits

Add computer control to your DJ or stage show. The DMX protocol was developed with the purpose of control in your Droi Stage Slow. The DMX protocol was everoped with the purpose of controlling dimmers, scanners, moving heads and other lighting devices with simple wiring. It is mainly used in theatres and discos, but you can use it in any place where central or automated lighting is needed. Use this kit to control DMX fixtures such as spotlights using a PC and USB interface. A comprehensive kit that includes software, USB cable and

enclosure. There's also a DLL provided so you can write your own software if you like. It can also be operated in stand-alone mode that outputs all 512 channels at the same time (9V battery required for stand-alone mode).

- Test software and DMX Light Player software included
- 512 DMX channels with 256 levels each
- 3 pin XLR-DMX output connector
- Windows 98SE or higher compatible
 Optional 9V battery needed for stand alone test
- Dimensions: 106(L) x 100(W) x 44(H)mm

Cat. KV-3610 **DMX Relay Control Kit**

Control a relay with the DMX512 protocol. It is actually a bus-controlled power driver. The relay will be activated when the DMX value of the set channel equals 140 or more and turns off when the value is 120 or less. Team it with KC-5482 to make a computer-controlled automation system. Short form kit contains DMX-512, XLR plug, PCB and all specified components.

- 512 unique addresses, DIP switch settable · LED indication for power supply, relay output & error status
- · Relay Hold function in case of DMX signal loss
- Switching capacity: 8ASupply voltage: 12VDC
- Power consumption: max. 100mA



DMX Control Dimmer Kit

This kit allows you to control a lamp or group of lamps through a DMX signal. You can use the USB Controlled DMX Interface kit (Cat. KC-5480) or any other control console compliant with the DMX-512 protocol as a controller. It will drive resistive loads like incandescent lamps and mains voltage halogen lighting. Short form kit contains XLR socket, PCB and all specified components

- 512 unique addresses.
- selectable with DIP switch

 Status LED for power and error detection
- Toroidal filtering for low noise Stand alone mode for testing
- Load capacity: 1000 W @ 230V (5A) or 500W @ 115V
- Power Input: 115/230 VAC • Dimensions: 150(L) x 60(W) x 45(H)mm Cat. KV-3614



Kits Qty 1+ \$99.00 DMX Controller - USB KV-3610 **DMX Relay Controller** KV-3612 \$29.95 DMX Control Dimmer

4 Channel 1200 Watt 230 Volt Light Chaser

The kit consists of a 'Black Box' with input leads for the 240VAC supply and 5 output leads (4 channels with common). You can connect as many lights to each channel as you wish up to a maximum load of 300 watts per channel. Can be used to attract attention to billboards, shop windows, exhibition stands etc. Maximum Load 1200 watts. Please note that this kit operates on 240VAC mains voltage and you should be extremely careful when using these voltages. If in doubt, have an electrician check your work before applying power

Measures approx. 144(W) x 55(H) x 70(D)mm

			, , , , , , , , , , , , , , , , , , ,	
7	Cat.	Qty 1+	Qty 5+	Qty 10+
	ΔΔ-0312	\$59.95	\$53.95	\$47.90

3 Channel Microphone Mixer

Combines three microphone audio signals into one for applications like karaoke. Each input has its own volume control. Use with our dynamic mics such as AM-4096/99

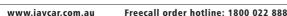
· No power required



Weight 20)5g			
7	Ca	t.	Qty 1+	Qty 4+
	A N.	A 4220	\$20.05	\$26.00



Qty 10+



Strobes & Pin Spots

STAGE LIGHTING

3W LED Pinspot Lights

Newest addition to our range of RAVE party lighting are these 3W LED Pinspot Lights. Compact and lightweight, but offers exceptional power and bright precision beam. Great for parties, stage, clubs and mood lighting applications. These are very cost effective and

greener alternative to halogen spotlights. They will also provide longer service out in the field.

Mains 240V powered.

Four models to choose from, each with different colour LEDs:

3W LED WHITE	Cat. SL-3425
3W LED RED	Cat. SL-3426
3W LED GREEN	Cat. SL-3427
3W LED BLUE	Cat. SL-3428

7	7	Cat.	Qty 1+	Qty 5+	Qty 10+
	White	SL-3425	\$24.95	\$22.35	\$19.70
	Red	SL-3426	\$24.95	\$22.35	\$19.70
	Green	SL-3427	\$24.95	\$22.35	\$19.70
	Blue	SL-3428	\$24.95	\$22.35	\$19.70

PAR36 Spotlight Lamp

6 volt, 30-Watt sealed beam bulb for our mirror ball pinspots with screw on connection terminals.



7			Qty 1+	Qty 5+	Qty 10+
	Spotlight Lamp	SL-2964	\$11.95	\$10.70	\$9.50

Pinspot Coloured Gel Caps

Designed for our Par 36 pinspot light (Cat SL-2960), this set of 8 gel caps include yellow, red, light green, dark green, blue, purple, amber and rose pink



Lighting Stand

This strong and sturdy lighting stand will extend from a minimum height of 1,530mm to a maximum of 3,650mm and is designed to carry up to 20kgs on the square section cross tree. An integrated tripod support has collapsible legs that extend up to 750mm from the centre line of the 1,500mm which provides good stability even when the stand is fully extended. The cross tree has 4 bolts for attaching up to 8 Pin Spots or other attachments. The entire stand is finished in matt black.



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	CL-2800	\$89.95	\$80.95	\$71.95

Light Clamp

Used to secure the pinspot lights to a mounting stand

- Gap size: 0 70mm
- Dimensions: 78(L) x 45(H) x 30(D)mm

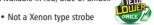


		-		
7	Cat.	Qty 1+	Qty 5+	Qty 10+
	SL-2969	\$5.95	\$5.25	\$4.75

STROBES

"Strobe" LED with Magnetic Base

The blue-light disco is back! This portable 'police' strobe light can be placed on any iron/steel surface and it will stay there put them on the fridge or filing cabinet, hang them from the ceiling and you've got yourself an instant disco. Also great for attracting attention to sale items in a shopfront window. Battery operated (3 x AAA), with a socket for adaptor use (requires a 4.5VDC 200mA adaptor - not included). Available in red, blue or amber.



7	Cat.	Qty 1+	Qty 2+	Qty 4+
Red	SL-3325	\$19.95	\$17.70	\$15.70
Blue	SL-3327	\$19.95	\$17.70	\$15.70
Amber	SL-3329	\$19.95	\$17.70	\$15.70

Rectangular Strobe Light - 24 LED

LEDs haven't always been a suitable alternative for illumination, accent and other general lighting application. However recent developments in production of high intensity LEDs and the ever decreasing price has allowed

for these energy efficient and long lasting light source to make their way to consumer orientated lighting products. This strobe light has super high intensity LEDs, that will add the necessary life to any party and produce an eye catching array of lighting effects to attract attention.

Can be set to flash at a slow or fast rate and are supplied with adjustable brackets for optimal positioning.



7	Cat.	Qty 1+	Qty 5+	Qty 10+
24 x White LEDs	SL-2895	\$29.95	\$26.90	\$23.70

Mini Strobe Light - Xenon

This unit uses a xenon flash tube and has a variable flash rate up to 10Hz.

The unit is housed in a compact case measuring 85(W) x 50(H) x 125(D)mm and is fitted with an adjustable mounting bracket

Operates on 240 VAC

Supplied with a 1.7m cable

tic use only	cabic		
	NOTE!!!		
	NEW & IMPROVED		
		Cat	t.

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	SL-2990	\$34.95	\$31.45	\$27.90

Xenon Globe for SL-2999

Spare globe for Laboratory Magnifier Lamp



					WARRANTY
7		Cat.	Qty 1+	Qty 5+	Qty 10+
	Spare Globe for SL-2999	SL-2693	\$12.95	\$11.35	\$10.35

76 White LED Strobe Light

This mains powered mini strobe features 76 super bright white LEDs with adjustable flash rate and sound activation. It is made from a strong plastic to keep the weight down to just 0.4kg and is supplied with mounting hardware. Energy efficient and long lasting party light ideal for domestic use

- 76 super bright white LEDsAdjustable flash rate and
- sound activation
- Dimensions: 140(L) x 120(Dia.)mm



				The second secon
7	Cat.	Qty 1+	Qty 5+	Qty 10+
	SL-3464	\$39.95	\$35.90	\$31.90

EFFECT LIGHTING

40 Watt Blacklight Fluoro Tube

Used extensively for live music, discos, night clubs, and great for parties. At our new low prices, you can now afford them.

- Requires standard 40 Watt fluoro fitting.
 Not available by mail order.
 Dimensions 1225 (L) x 25 (Dia)mm.

7	Cat.	Qty 1+	Qty 5+	Qty 10+
Each	SL-3152	\$29.95	\$26.90	\$23.70

Mini Ultra-violet Fluoro Light with Torch

Use to detect counterfeit currency, to check for fake ID, gemstone and mineral inspection, or to just have fun by making objects glow. Includes small white spotlight.



- Hand carry strap
 Requires 4 x AA batteries
 Dimensions: 160(L) x
- 52(D) x 23(W)mm



7	Cat.	Qty 1+	Qty 5+	Qty 10+
	SL-3146	\$14.95	\$13.35	\$11.70

PAR 64 2 Channel 177 UV LED DMX Spotlight

A lightweight, compact and cool-running blacklight Par 64 spotlight with 3 operating modes: sound-active, automatic and DMX control. It features 177 UV emitting LEDs, brightness control, strobe effect and a built-in microphone. 240V powered, designed for long life operation and easy installation with mounting bracket included. Ideal for live performance stages,

installations in night clubs or UV parties.



- · Channels: brightness and strobe effect
- Dimensions: 310(L) x 240(W) x 200(H)mm



7	Cat.	Qty 1+	Qty 5+	Qty 10+
	SL-3466	\$119.00	\$106.95	\$94.95

CREATE AN ATMOSPHERE

Snow Machine

Add an extra dimension to parties or entertainment events by producing a snow storm on command! The jet of snow consists of small dense foam balls which float majestically to the ground like real snow to create an artificial blanket on the ground. Once it lands the snow slowly dissipates leaving a light residue and unlike fog or smoke it will not trigger smoke detectors. Includes a versatile mounting bracket for easy setup and wireless remote control to trigger the snow.

- 240VAC operation
- 1.3 Litre fluid capacity
 Dimensions 337(L) x 260(W) x 227(H)mm
- Snow juice sold separately (1L: AF-1217, 3L: AF-1218)

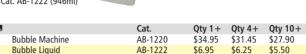
NOTE: Snow machine liquid may cause eye or skin irritation and can be slightly slippery on smooth surfaces. Handling and safety directions available online.

					WARRANTU
7		Cat.	Qty 1+	Qty 4+	Qty 10+
	Snow Machine	AF-1216	\$99.00	\$88.95	\$78.95
	Snow Juice 1 Litre	AF-1217	\$9.95	\$8.75	\$7.75
	Snow Juice 3 Litre	AF-1218	\$19.95	\$17.70	\$15.70

Bubble Machine

Enhance the atmosphere at your next party or special event with this affordable bubble machine. It has an easy to use on/off switch on the unit and can be operated two ways: by mains power adaptor (included) or with batteries for portable application (Requires 2x C batteries, not included).

· For best results, use our Bubble Mania bubble liquid Cat. AB-1222 (946ml)



Rave Fog Machine

This tough fog machine will add the extra dimension to any mobile DJ setup, home party or disco lighting - with laser light shows, mirror balls and other party lighting coming out in full effect. The unit produces clouds of white fog on demand with the use of an illuminated 3m wired remote control Features an adjustable mounting bracket, tough metal construction and fluid gauge.

- 240VAC operation
 70 cubic metres/min fog output
 800ml fluid capacity
 330(L) x 160(W) x 140(H)mm

7

- Fog juice sold separately (AF-1212)





7		Cat.	Qty 1+	Qty 4+	Qty 10+
	Fog Machine	AF-1214	\$99.95	\$89.95	\$79.95
	Fog Juice 1 Litre	AF-1212	\$17.95	\$15.95	\$14.35

DMX Fog Machine

The ambience and mystique associated with fog and mist is excellent at nightclubs, parties, and spooky film re-enactments. This unit gives you a range of control options which include the ability to set the machine to burst fog for specific durations at certain intervals as well as to manually trigger with the supplied remote control. But the real standout feature is the support for DMX. Hook this up to your DMX512 controller and fog will waft out with the beats allowing total customisation over your stage or party



Remote included

HIIIIII

• Dimensions: 335(L) x 150(W) x 186(H)mm

Fog juice to suit - AF-1212 (available separately)

Fog Machine

Fog Juice - 1 Litre











Strawberry Essence Scent for Fog Machines

Strawberry essence additive that provides a more desirable smell to your fog machine. Just add a few drops to the fog juice container on your fog machine, and hey presto, strawberry scented fog!





7	Cat.	Qty 1+	Qty 4+	Qty 10+
20ml	AF-1211	\$14.95	\$13.35	\$11.70

AF-1213

AF-1212

Rave

AF-1217

IT & Comms

We said earlier that we don't sell the 'big boxes' ie. Flat screen TV's, big home theatre amp/AV systems, and of course we do not sell PC's either.

What we do do - and do it well in our estimation is all the other stuff - the interface gear, the power supplies, UPS's, rack cabinets and the like. This year our line up is bigger than ever.





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HIGH DEFINITION MULTIMEDIA - STORAGE & PLAYERS

Android Smart TV Media Player - 1080p

Powered by the Android operating system this smart TV media player will add a new dimension of interactivity to a plasma or old CRT. It will transform the TV into an internet browser, games console, media player, picture gallery, file manager, social networking tool etc. The unit features an SD card slot and 2 x USB ports for connecting a USB hard drive or a wireless keyboard/mouse combo for easy remote control. Media collections can be accessed and viewed from a USB hard drive or directly from a shared drive on a Windows/Mac/Linux machine. It supports playback of most of the popular movie formats such as MKV, VOB, DivX etc and many audio formats like MP3 and OGG. Video can be streamed straight from YouTube through the Chrome browser app and a myriad of Android apps can be downloaded and installed to extend the usability of the device. For those stuck in the dark ages of TV viewing this media player is a welcome ungrade.

Preinstalled apps include YouTube, Facebook, twitter, MSN, a network file browser, video player and the all important game "Angry Birds".



System Specifications	
Туре	ARM Cortex A9
Frequency	800MHz
RAM	DDR2-512MB
Storage	NAND 4GB
OS	Android 2.3
Network connection	Ethernet/WIFI
Video Resolution	420p, 576i, 576p, 720p, 1080i,1080p
Video Output	HDMI, Component (YPbPr), Composite video
Network Connectivity	1 x RJ45 Port
Wireless	802.11b/g/n
Dimensions	210(L) x 171(W) x 35(H)mm



Multimedia	Support

RELATED PRODUCT

For an improved experience we recommend using this device with our mini wireless QWERTY keyboard with trackball, see page 298



Cat. Qt: XC-4208 \$15

Qty 1+

Qty 4+

Qty 10+ \$158.95



Over the years, digital media has been scattered over CDs, DVDs, hard drives, USB flash drives etc, and accessing it centrally has been cumbersome. Media players are a great way to easily view your collection of downloaded movies or digital pictures on your TV. If you have a USB hard drive with a

collection of DIVX movies for example, just connect it to the media players USB port and start watching with ease. It also has a slot that will read SD/MMC/MS cards from digital

The user interface is as simple as they come with an eye-catching design. The remote control allows you to pause, fast forward, zoom, jump back to the menu, switch display ratio modes and much more. Connection to your TV can be made through HDMI, YPbPr component or composite video. Extensive file support makes this the perfect home entertainment accessory.

Specifications			
Video playback	Supports AVI/MP4, DivX, XviD, MPEG1/2,		
video piayback	RM, RMVB, DAT, MOV (not H.264) and VOB		
Music playback	MP3, WAV, OGG and WMA audio formats		
Picture playback	Supports JPEG, GIF, BMP, TIFF and PNG image formats		
Video Connections	Composite (connect composite cable to Y socket/green),		
video Connections	YPbPr, HDMI		
Audio Connections	LR Audio RCA		
Supports	4:3 and 16:9 display ratios		
Maximum resolution	HDMI/YPbPr up to 720p		
TV Display modes	NTSC composite / PAL composite / HD YPbPr / HDMI /		
	NTSC Interlaced / NTSC Progressive / PAL interlaced / PAL progressive		
Subtitle format	SRT, SUB, SSA, SMI		
Dimensions	139(W) x 30(H) x 95(D)mm		

7	Cat. XC-4206	Qty 1+ \$69.00	Qty 4+ \$61.95	Qty 10+ \$54.95	LIEHR WARRENTY	PRICE
	AC-4200	\$09.00	JU1.33	\$34.33	шанание	

Otv 4+

\$106.95

Full High Definition 1080p Media Player

A sleek media player dripping with functionality and convenience. Plug in your storage device, be it a portable USB hard drive, a USB thumb drive or even an SD card and jump right in and start viewing media on the TV from the comfort of your sofa.



Connectivity does not end there: The UPnP (Universal Plug and Play) feature allows you to link the media player to your laptop, desktop PC or NAS device over your home network and play files directly from them. The graphical user interface is beautifully designed and augmented with a logical navigation structure that makes it a joy to use. The remote control gives you one press access to video modes suitable for your TV, display ratio adjustments, pause, fast forward/rewind and all the features you'd expect from a remote. Media format support is extensive (see below specs), VOB support is particularly useful for centralising your decrypted DVD collection for playback through the media player. The unit is finished in glossy black and is compact enough to sit comfortably in your entertainment centre.

- High Definition video up to 1080p
 AC3/DTS audio with HDMI 1.3 / Coaxial output
- HDMI, YPbPr (YUV component) & AV outputs
- Ethernet connectivity (UPnP)

\$94.95

Specifications	
Supported video formats	RM/RMVB/AVI/MPEG4/MKV/M2TS/DivX/XviD/
	Dat/VOB/MP4/MOV/SWF
Supported audio formats	MP3/WMA/OGG/WAV/ACC/AC3/M4A/RA/RM
Picture	BMP/JPEG/PNG/GIF/TIFF
Subtitle	SRT, SUB, SMI, SSA, formats
Otv 10⊥	

Qty 1+ \$119.00 XC-4204 **DIGITAL TV & IPTV**

Economy USB Digital TV Stick

Digital TV on your PC for under fifty bucks and a bundle of extra features including Picture-in-Picture, still and video image capture and much more. Easy to install and use and no bigger than a USB stick.

- · Digital TV and radio program recording
- Real-time video recording
- Still image capture
- Picture-in-picture functionOne-touch channel scan
- Multi-lingual installation (WOW!)
- System requirements: Windows XP/2000/Vista 128MB RAM

Requirements for Picture-in-Picture DirectX 9 compliant (VMR9) VGA card USB 2.0 port

Not Available in New Zealand

7	Cat.	Otv 1+	Otv 4+	Qty 10+
**	cut.	Qty i i	Qty + i	Qty IO I
	XC-4888	\$29.95	¢26.00	¢22.70
	AC-4000	\$23.33	\$20.50	\$23.70

AUDIO CONVERSION TO DIGITAL

USB INTERFACE / DATA CABLES

RCA to USB Digital Converter

Studio quality recording solution. Suitable for converting any line-level audio device to USB for stereo PC recording. RCA to USB converts analogue to digital audio in high resolution. Simply install Magix Audio Cleaning Lab SE & Audacity software included to import your music & optimise sound recording quality.

- 16-bit 44.1kHz digital audio output
- Gold plated terminals
- Recording software included Suitable for PC & MAC
- Cable Length: 1.2m



<i>n</i>	Cat.	Qty I +	Qty 3+	Qty 6+
	GE-4050	\$34.95	\$31.45	\$27.90

IPTV Internet Digital TV Tuner

With this excellent IPTV tuner you can watch TV on your computer and record programs to your hard drive. The Cyberlink® software lets you schedule recordings and even watch TV, view photos, read documents or watch videos locally, or through another computer anywhere in the world via the Internet. You can also connect a DVD player or camcorder to the AV inputs and keep up-to-date with the happenings back home. Time shifting is also supported. This is a great product that could form the heart of a sophisticated multimedia system. The latest software versions are available as free downloads from the Cyberlink® website. Bundled with Cyberlink® Live & Hypermedia Centre software.

XC-4861

Freecall order hotline: 1800 022 888

- System requirements:
 Pentium IV, 1.6GHz or Athlon equivalent
- 256MB RAM / USB 2.0 port
 DirectX 9.0 supported graphics card
 AC97 compatible sound card
- 2GB HDD spaceWindows XP SP2/XP MCE/Vista



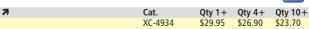
· Cable is 2 metres long

keyboards, controllers, instruments, sound cards, samplers, drum machines etc. Plug and play,

no software or drivers required. MIDI in and

MIDI out connectors with LED indication.

USB MIDI Interface Cable Connect any MIDI device to your computer:



MEDIA - SD CARDS

MicroSD Memory Cards with Adaptor

These MicroSD card is fully compliant with SD spec V1.1 and offer high write speed, lower power consumption, and superior performance. Supplied with a standard SD adaptor so you can use them in a standard card slot or reader.

• 2GB, 4GB & 8GB capacity available

Weight: 2g
Call for latest pricing.
Dimensions: 15(L) x 11(W) x 1(H)mm





Transcend®	
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anscend GB® mgg	Adapte

7	Cat.	Qty 1+	
2GB	XC-4998	\$9.95	
4GB	XC-4981	\$11.95	
8GB	XC-4982	\$19.95	

MEDIA - Wi-Fi SD CARDS

Flucard® PRO Wireless SD Card - 8GB

Flucard® PRO is a wireless SD card that liberates your photo-taking experience, transforming your camera into a wireless device and giving you a whole new dimension to capturing, storing and sharing your precious moments.

PLUG AND PLAY

As a wireless SD card, the card is compatible with any device with a SD host slot. Just plug it in and its built-in software will instantly transform your Digital Camera into a Wi-Fi device and give you access to the other features listed below.

P2P SHARING

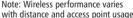
It not only allows wireless photo and video sharing (P2P) between Digital Still Cameras but also enables sharing between other Flucard® enabled devices. It can be your wife's Camera, your Dad's Camcorder or your sister's digital photo frame. It also enables sharing with other Wi-Fi devices. Show off your precious moments by previewing, selecting and downloading them onto your friend's and family's PC, Laptops, Tablets and Smartphones wirelessly. Configurations can also be done on the Flucard® through these mobile devices.

Upload your photos wirelessly to the Flucard® Portal or a server of your choice. Share, organize and print your photos from the Portal which comes with a free 2GB storage space for every purchase of a Flucard®. You can then access them anywhere with a web surfing device.

INSTANT BACKUP ON-THE-GO

The server upload also instantly creates a backup for your photos and videos, allowing you to free memory space on your Flucard® so that you can continue snapping and create new memories

Specifications		
Capacity	8GB	_
SD Interface	SD memory Card Physical Layer Version 2	.0
Wireless Interface	802.11b/g/n Wi-Fi technology	
Wireless Security	WEP 64/128, WPA,WPA2	
Wireless Range	Camera to PC	
Infrastructure	20m (Typical),	
AP Mode	7.5m (Typical)	
Camera to Camera		
AP Mode	up to 6 m (Camera model applies)	
Dimension/ Weight	32mm (L) x 24mm (W) x 2.1mm (H) / 4g (Compliance with SD memory Card Physical Layer Version 2.00)	
Antenna	Internal	
Buzzer	In-built Buzzer	_
SD performance	Class 6	
Sequential Write	no less than 6 MB/s	
Wireless performance		D
Infrastructure	65 Mbps, max connection rate	1
AP mode	54 Mbps, max connection rate	
Transfer speed	up to 2 MB/s	





Note: Camera & laptop not included

7	Cat.	Qty 1+
*	Cat.	Qiy i⊤
	XC-5620	\$99.00
	AC-3020	\$99.00

MEDIA - FLASH DRIVES

Micro USB Thumbdrives

Super slim USB Micro thumbdrive that measure only 32mm long and less than 3mm thick. Attach to your keyring and have a memory card wherever you go.

- Windows and MAC compatible
- Plug and Play
 USB 1.1 and 2.0





XC-5612



V Verbatim

4x DVD+R DL

Contact us for latest pricing

Verbatim

4x DVD-RW

Contact us for latest pricing

Cat. Qty 1+	
4GB XC-5610 \$9.95	
8GB XC-5612 \$13.95	
16GB XC-5614 \$24.95	

XC-5611

4GB Jaycar Mini USB Flash Drive

A compact, durable USB flash drive

Stylish and portable; attach it to your key ring or keep it in your pocket.

INCLUDES JAYCAR CATALOGUE IN PDF FORMAT PRF-I OADED

- Storage Capacity: 4GB
 Dimensions: 35(L) x 15(W) x 7(D)mm







MEDIA - DVDS

Verbatim DVD 8.5GB Dual Layer 2.4x

Verbatim DataLifePlus (AZO)

- 8.5 Gigabytes of storage capacity on a single sided disc. No need to flip the disc
- Advanced AZO recording dye optimizes read/write performance
- Largest compatible DVD back-up & data archiving format
- Record 4 hours of DVD quality television
- and video (16 hours VHS quality)

 Limited Lifetime Warranty



rvarranty		SURRANTE
Cat	Qty 1+	
(C-4744	\$2.75	

\$2.75

Verbatim DVD-RW 4.7GB Single 4x

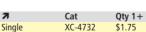
XC-4743

Verbatim DatalifePlus (SERL) DVD-RW

4.7GB Jewel Case Singles 4x

Single DVD+R Single DVD-R

- 4x DVD-RW recording speed (version 1.2)
 Re-recordable up to 1.000 times
- Super Eutectic Recording Layer optimises read/write performance and durability Superior Archival Life
- · Limited Lifetime Warranty



Verbatim DVD+RW 4.7GB Single 4x

Verbatim DataLifePlus (SERL) DVD+RW 4.7GB Jewel Case

- Certified by leading drive manufacturers
- Largest compatible DVD back-up and data archiving format for computer drives
- Super Eutectic Recording Layer optimises read/write performance and durability Record 4 hours of DVD quality television
- and video (16 hours of VHS quality)
- Ideal for archiving home moviesLimited Lifetime Warranty

Cat XC-4734 Single



Contact us for pricing



MEDIA - DVD (CONTINUED)

Verbatim DVD+R 16x

Verbatim DataLifePlus (Azo) DVD+R 4.7GB Jewel Case Singles 16x

- Compatible with 1X-16X DVD+R Hardware
- Record 4.7GB or 120 minutes of data and video
- in approximately 5 minutes

 Advanced AZO recording dye optimises read/write performance
- Ideal for recording up to 2 hours of DVD quality home movies and video clips
- Archive and back up, up to
- 4.7GB of important data Compatible with 16X DVD+R drives from Sony, Dell, HP, Compaq and others
- Read compatible with most DVD-ROM drives and DVD video players
- Limited Lifetime Warranty Contact us for latest pricing

7	Cat	Qty 1+
Single	XC-4733	\$0.95

Verbatim DataLifePlus (Azo) DVD-R 4.7 GB Jewel Case Singles 16x

- Compatible with up to 16X DVD-R Hardware
- · Advanced Azo recording dye optimizes read/write performance
- Ideal for recording up to 2 hours of DVD quality home movies and video clips
- Archive and back up, up to 4.7GB of important data
 Compatible with 16X DVD-R
 drives from Pioneer, Apple,

 V Verbatim Sony, Panasonic and others

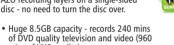


Single



Verbatim DVD+R DL 8.5GB 8x Spindle 10 Pack

Double the storage capacity with two AZO recording layers on a single-sided disc - no need to turn the disc over.



- mins of VHS quality) Supported by high speed Double
- Layer writers, up to 8X speed Compatible with DVD+R DL drives from leading
- manufacturers
 Ideal for archiving
- Limited Lifetime Warranty Contact us for latest pricing

7	Cat.	Qty 1+
10 Pack	XC-4746	\$23.95

Verbatim DVD 4.7GB Inkjet Printable 50 Spindle 16x

- 1X to 16X DVD recording speed
 Full-colour, high resolution, photo-quality printing
- Superior ink absorption

- Crisp & clear text reproduction
 Excellent ink drying time
 Compatible with inkjet disc printers from Primera, Microboards, Epson and others. Advanced AZO recording dye optimises
- read/write performance Superior Archival Life
- · Limited Lifetime Warranty





Contact us for latest pricing

7	Cat	Qty 1+
50 Disks DVD-R	XC-4738	\$29.95
50 Disks DVD+R	XC-4745	\$29.95

MEDIA - BLU-RAY

Verbatim Blu-Ray **Discs 25GB Single**

Blu-ray discs are designed for storing and playing back high definition video but the 25GB discs are also great for backing up valuable data. XC-4748 is rewriteable so you have extra flexibility in the event of burning the wrong data or for general re-use. High quality Verbatim super hard coat gives extra protection for general use. Case included.

- RI II-RAY DISC 25GR RD-R 4X
- Cat XC-4747 BLU-RAY DISC 25GB BD-RE 2X Cat XC-4748





Contact us for latest pricing

7		Cat.	Qty 1+
Single	BD-R	XC-4747	\$3.95
Single	BD-RE	XC-4748	\$6.50

CD/DVD Jewel Cases For Single Disk

PACK OF 5 Replacements CD case for those that break or wear out.



7	Cat	Qty 1+	Qty 4+	Qty 10+
Pkt 5	AR-1470	\$3.45	\$3.05	\$2.75

Coloured CD/DVD Jewel Cases

PACK OF 7 See through coloured DVD jewel cases One of each colour. blue, green, purple red, yellow, clear & black

LCD Screen

Cleaning Kit

Keep your computer, TV

and other LCD screens

fingerprints without streaking, scratching or

staining

clean. Remove dust and

· Elastic anti-static brush

Special microfibre material which

harm LCD protective coating

AR-1418

is capable of preventing panel scratch and will not

\$11.95

Qty 4+

\$10.70

\$9.50

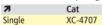


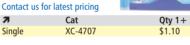
7	Cat	Qty 1+	Qty 4+	Qty 10+
Pkt 7	AR-1481	\$3.95	\$3.45	\$3.15

MEDIA - CD

Verbatim Datalife 80min 700MB **CD-R Jewel Case Singles 52x**

- · Approved high speed 52X recording
 Compatible with leading
- manufacturers CD-R drives
- Ideal surface for personalising CD with marker or labels
- Long archival lifeLimited Lifetime Warranty





Verbatim



Verbatim DataLifePlus CD-R 80min/700MB Inkjet Printable

50 Pack Spindle 52x Photo quality inkjet printable

- 52x recordingBright white surface
- Print pictures and text directly on the disc
- Co CD

Contact	us	for	latest	pricing
7			Car	t

Contact us for la	,	
7	Cat	Qty 1+
0 Disks	XC-4718	\$21.95





mpatible with direct D/DVD inkjet printers nited Lifetime Warranty	
tact us for latest pricing	
Cat	Qty 1+

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If you experience

CD/VCD/DVD Lens Cleaner

CLEANING SYSTEMS

nping, loss of quality disc failure, then it's bably because your ns are dirty. This easy use laser lens cleaner only cleans your CD DVD equipment, but it also shows a short

animation while you wait. Supplied in a

vel ca	ase.			
I	Cat	Qty 1+	Qty 4+	Qty 10+
	AR-1416	\$11.95	\$10.70	\$9.50

STORAGE

Slimline CD/DVD Mailing Sleeve

PACK OF 10

Mail your precious CDs without fear of damage with this flexible clam style protector. The mailer has a clear window and centering spigot to securely hold the CD in place. Measures125mm x just 4.5mm thick which won't crack and break like the average jewel

Colour is opaque

7	Cat	Qty 1+	Qty 4+	Qty 10+
Pkt 10	AR-1480	\$5.95	\$5.25	\$4.75

Radial CD/DVD Cleaner

Dirty CDs and DVDs can cause loss of picture quality and "disc jumping" when played through your equipment. This manual disc cleaner will clean dirty CDs and DVDs with just a few turns. Radial cleaning is the best cleaning method because the disc and the cleaning pad is rotated across the disc surface rather than around it.

Removes any dirt and fingerprints which may cause problems when reading the disc. Supplied with 3 cleaning pads and 20ml cleaning solution bottle.

7	Cat	Qty 1+	Qty 4+	Qty 10+
	AR-1414	\$11.95	\$10.70	\$9.50

ADSL2+ Modems & Routers

WIRELESS HIGHSPEED NETWORKING

Upgrade your wireless network to the latest high speed wireless technology & increase data throughput at the same time. These impressive devices use MIMO technology to significantly improve transmission range & minimise transmission errors. They are backward compatible to 802.11b & 802.11g systems & support Windows (98SE, ME, 2000. XP. & Vista), Linux & Mac systems.

- 802.11n, 802.11g, 802.11b protocols
- · 300Mbps data transfer rate
- · Supports infrastructure and ad-hoc modes
- 64/128-bit WEP data encryption

2	WI-FI STANDARDS							
	Wi-Fi Standard Type	Protocol	Frequency (GHz)	Throughput (Typ-Mbps)	Data Rate (Max-Mbps)	Typical Range Indoors(m)	Typical Range Outdoors(m)	
	Α	802.11a	5.15-5.875	23	54	30	100	
	В	802.11b	2.4-2.5	4	11	30	100	
	G	802.11g	2.4-2.5	19	54	35	110	
	G+	802.11g+	2.4-2.5	35	125	35	110	
	MIMO	802.11g	2.4-2.5	50	125	50	130	
	N	802.11n	2.4	74	300	70	160	

MU EL CTANDADDA

ADSL2+ MODEMS / ROUTERS

Single Port ADSL2+ Modem

An excellent and affordable ADSL2+ modem for those who simply want their Internet connection up and running with minimal fuss. It supports PPPoE, PPPoA and bridging mode for connection to a multi-port router if you want to expand your network in the future. There is a built-in firewall to give protection against malicious attacks and IP address filtering to stop certain users on the network from accessing

the web. Setup is straightforward with the local web management tool. Port forwarding is included to ensure you can play all your favourite games and applications without a problem. The unit comes with a splitter/filter to allow you to use the Internet and phone from the same phone socket

CONNECTION TYPE:

- PPPoE
- PPPoA
- Static IF
- Dynamic IPIPoA
- Bridge

VIRTUAL SERVER:

- Single Port Forwarding
- Port Range Forwarding
- Port Trigger
- DMZ Host
- UPnP

ROUTING TABLE:

- Routing TableStatic Routing

SECURITY:

- Client Filtering
- IP Filtering MAC Address Filtering
- Local Web ManagementRemote Web Management
- Credential
- IPSec
- WAN Ping

SYSTEM TOOLS:

- Time Setting
 Dynamic DNS
- Backup/Restore
- Firmware Upgrade Restore to Factory Default Setting
- Login Password Modification
- Syslog



YN-8316 \$39.95

\$35.90



- 1 x RJ45 port 1 x USB port for USB access to the modem/internet (able to use two computers one with Cat5 cable and one with the supplied USB male to male cable)
- 1 x splitter/filter
- · Easy setup wizard
- Dimensions: 150(L) x 95(W) x 25(H)mm Qty 10+

\$31.90



300Mbps Wireless-N ADSL2+ Modem Router with 4 Ports

Combining 4 x 10/100Mbps LAN ports with the speed and freedom of 802.11n (300Mbps) wireless connectivity, this modem/router gives you the flexibility you need for your home or office network. The wireless switch allows speeds of up to 300Mbps and is backward compatible with 802.11g and b clients. A variety of connection methods to support most ISPs are included as well as a multitude of advanced features to ensure a smooth web experience. MAC address and IP address filtering are available

Cat.

Cat.

YN-8330

YN-8318

for controlling which users on the network can access the web, a built-in firewall which will protect against online threats and QOS bandwidth to minimise the chance of certain users hogging available network bandwidth. It uses one antenna which can be detached and upgraded with more a powerful antenna (available separately) for better throughput and signal strength. A solid and stable unit with features to match

MAC address access control for up to 30 entries
 Supports Auto MDI/MDIX

Supports MAC address filtering, IP address filtering, URL filtering, and NAT rules
 Supports UPnP and DDNS
 Administration interface supports Firefox

Supports wireless channel auto-selection

· Provides a router system log

Supports DHCP server/client Supports SNTP

Supports virtual server, DMZ host

 Wireless channel auto-selection
 Supports LAN access control over Internet connection
Ready for broadband TV boxes

Supports QoS bandwidth control

1.0, IE5.5 or above

Supports WDS

Detachable antennas



- ADSL2 + Modem, Wireless-N Router, 4-Port Switch, and Firewall
 Complies with IEEE 802.11n (Draft 2.0), IEEE 802.11b,
- and IEEE 802.11g standards
- MIMO technology utilizes reflection signal to greatly increase the transmission strength and range
 Supports up to 6 times the transmission rate and double the range of 802.11g products
 Provides 300Mbps transmission rate

- Supports Bridge, PPPoE, PPPoA, IPoA, and MER connections Supports WMM for improved audio and video signals
- Supports 64/128-bit WEP, WPA, and WPA2 security standards
- Supports 802.1x security authentication standard RJ11 splitter with filtering included
- Supports four 10/100Mbps Auto-Negotiation Ethernet LAN ports Supports ATM Forum UNI 3.0, 3.1, and 4.0
- Setup wizard for fast and easy configurations
- WPS (PBC and PIN) enabled device Supports remote/local web management
 - Supports wireless roaming technology for highly efficient connections Supports SSID stealth mode
- Qty 1+ Qty 4+



High Power Wireless Outdoor Router/Range Extender 802.11n

Need a long range, building to building wireless network? With a wireless power of 600mW this unit has excellent point to point range with the installed internal directional antenna. If omni directional transmission is required then you can connect an external antenna (sold separately) via the SMA connector at the base. Though designed for installation outside, please ensure that it is installed under an eave in position where it will never get wet. Features PoE (Power over Ethernet - which means you can send the power over the network cable to make it easier to get power to the router).

- LAN port 10/100 (featuring PoE)
- PoE power injection adapter included 12VDC 1A Power supply included Antenna Internal Directional 9dBi

\$89.95

- High data rate up to 150Mbps Auto rate fallback in case of obstacles or interference
- Supports point-to-point and point-to-multi point bridge function Supports WDS (Wireless Distribution System) repeater mode

Otv 10+

Supports AP Client mode

\$169.00

- Supports WEP, WPA, WPA2, AE2, 802.1x authentication Supports WPS (Wi-Fi Protected setup) function
- Supports Web-based configuration
- Supports operation modes: Gateway, Bridge, Wireless ISP Supports Low Noise Amplifier (LNA)
- Supports VPN pass through PPPoE, PPTP, and L2TP connections Dimensions 225(H) x 77(W) x 59(D)mm

\$134.95

Qty 4+ Qty 10+ Otv 1+ \$151.95





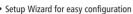
Prices in Australian Dollars

Want it fast? How about next day delivery? See page 4 for details.

802.11N HIGH SPEED WIRELESS NETWORKING

802.11n Wireless-N **Broadband Router** with 4 Ports

Expand your network with ease, reliability and security. A Wireless-N router with a wireless access point function combined with the flexibility of a 4-port switch, and a built-in firewall. Setup is streamlined through the configuration wizard where you can change dozens of settings. The router supports QoS bandwidth control to ensure network performance is not adversely affected by a limited number of high-demand clients. Access control for up to 30 MAC addresses, auto negotiation on 802.11b, 802.11g and 802.11n wireless networks, supports LAN control over an Internet connection, DHCP server/client, supports virtual server DMZ host and many other settings to give you complete control over the



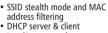
- · Provides up to 3 times the transmission rate & double the range of

- Detachable antenna

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8305	\$44.95	\$40.45	\$35.90

802.11n Wireless **Broadband Router**

The device integrates a router wireless access point, four-port switch, and firewall all in one compact package and employs advanced encryption and packet filtering to protect your network from outside attack. The unit can be managed through a local/remote web browser and is password protected. This is a first-rate unit at an attractive price and is a good choice for SOHOs, and small enterprises



- Local/remote web management 64/128-bit WEP data encryption
- Virtual server and DMZ host

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8300	\$69.95	\$62.95	\$55.95

High Power Wireless-N USB 2.0 Network Adaptor

Able to reach wireless networks from significant distances with enough signal strength to do what you need. The unit can connect to wireless networks up to 1.5km away.

• Dimensions: 75(L) x 58(W) x 10(H)mm

Antenna: 172(H)mm

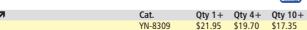


Qty 4+ Otv 10+ YN-8306 \$44.90 \$39.90

150Mbps Nano 802.11n USB 2.0 **Wireless Network Adaptor**

They don't get much smaller than this. Excluding the USB plug, this wireless-N network adaptor measures in at an astounding 5mm wide. It's the ultimate in discrete networking and perfect for the PC, laptop, or netbook.

- Compatible with 802.11n/g/b networks
- Compatible with Windows XP, Vista, 7, Mac, Linux
- USB 2.0
- Transfer rate up to 150Mbps
 Supports 64/128-bit WEP, WPA (TKIP with IEEE 802.1x),
 WPA2 (AES with IEEE 802.1x)
- Dimensions: 15(L) x 5(W) x 17(D)mm



300Mbps Mini 802.11n USB 2.0 Wireless Network Adaptor

Add 802.11n wireless capability to your computer. Supports transfer speeds up to 300Mbps and is part of the 802.11n standard. A secure, sleek and convenient networking upgrade for the home or office.

- Security: 64/128bit WEP encryption WPA/WPA2 and WPA-PSK/WPA2-PSK encryption
- Wi-Fi Protected Setup (WPS Compatible with Windows, Linux and MAC OSX
- Dimensions: 58(L) x 26(W) x 9(H)mm

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8307	\$29.95	\$26.90	\$23.70

1Gb PCI Network Card

Upgrade your home or work computers to blazingly fast gigabit speeds. Transferring large amounts of data can bring the common 100Mbps network to a crawl. This 1000Mpbs Ethernet card will give you the bandwidth you need so you can spend less time copying large

files. Compatible with 10/100/1000Mbps speed networks



7	Туре	Cat.	Qty 1+	Qty 4+	Qty 10+
	PCI	YN-8063	\$14.95	\$13.35	\$11.70

300Mbps 802.11n PCI-E **Wireless Network Card**

For PC motherboards lacking in Wi-Fi this is a simple upgrade. Just slot it in a spare PCI-E port for 300Mbps wireless connectivity. The card itself is tiny with dual antennas for the best possible reception and transfer

- Compatible with Windows and Linux

- Plug and play
 Complies with wireless
 802.11b/g/n standards
 Wireless security: WEP 64/128, WPA, WPA2
- Dimensions: 65(L) x 43(W)mm (without antenna)

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	VN-8326	\$34.95	\$31.45	\$27.90

	Which Product Is Right For You?								
Speed Surfing Email VoIP Streaming File Storage Online Streaming Music & Sharing Gaming Video (H						Streaming Video (HD)			
FAST	54Mbps	√	√	√					
FASTER	150Mbps	√	√	√	√	√			
FASTEST	300Mbps	√	V	√	√	V	V	V	

DESKTOP PCI CARDS

4 Port Internal USB 2.0 PCI Card

With the latest USB 2.0 specification, this 4 Port USB card will operate your USB 2.0 devices with speed The device also supports USB ver 1.0. It installs into a free PCI slot providing multiple USB ports without taking up any desk space ordinarily wasted by hubs. Its 4 ports are outward facing with double connection to port 4 located on the inward side of the card allowing one of your devices to operate from the inside of the case or to be mounted on the front panel.

Please note that only one device can be used at a time on either connection to port 4

Also supports all plug and play features offered by USB standard

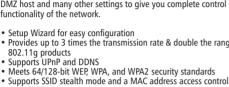


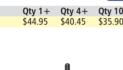


7	Cat.	Qty 1+
	XC-4817	\$14.95





























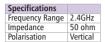


Networking - Antennas

NETWORKING ANTENNAS

Wireless Networking Antennas - 2.4GHz

Want to get a longer range in your wireless network? Here's a quick and inexpensive way to improve the range at either your base station or terminal. These antennas are specifically designed for 2.4GHz applications and 802.11 wireless networking is an ideal application. This rubber antenna is a dipole design and features a detachable base. Supplied with a 1.5 metre lead terminated to a reverse SMA connector. Both models supplied with a detachable magnetic base. See our adaptors section for conversions if needed.





7	Gain	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	5dB	195mm	AR-3273	\$19.95	\$17.70	\$15.70
	11dB	380mm	AR-3277	\$39.95	\$35.90	\$31.90

Dipole MIMO Antenna 7dB - 2.4GHz

Suitable for Wireless N routers to improve signal strength and data throughput. Higher end wireless N routers make use of 3 antennas to maximise the amount of bandwidth the unit can send and receive.

Due to a variety of factors, the signal strength and transfer speeds on these routers may not reach their full potential. Upgrading the antennas may rectify any problems you have. This MIMO antenna consists of 3 aerials that can be moved 120° around their axis or rotated 90° so they are perfectly horizontal. It has a 2m cable and magnetic base so you can run it outdoors or into a position to tap the full spacial multiplexing power of your router.

Specifications	
Working Frequency Range	2400 - 2500MHz
Cable length	2m
Gain	7dB
Antenna radiation	Omni-directional
Impedance	50 ohm
Dimensions	295(H) x 85(D)mm



Wireless Omni Antenna 12dB - 2.4GHz

An omni-directional 2.4GHz antenna suitable for boosting signal strength and range in WLAN applications. The fibreglass construction provides excellent weather proofing properties making it ideal for mounting outside. The stainless steel base features an N type female connector.

Suitable 5m lead (N plug to SMA plug) available separately - Cat. WC-7822

Specifications	
Working Frequency Range	2400-2493.5MHz
Gain*	12dB
Impedance	50 ohm
Power handling	20W
Connector	N type Female
Dimensions	960(H)mm x 20(Dia)mm





7	Cat.	Qty 1+	Qty 4+	Qty 10+
Antenna	AR-3284	\$99.00	\$88.95	\$78.95
5m Lead N Plug to SMA Plug	WC-7822	\$34.95	\$31.45	\$27.90

ΔR-3284

3G Antennas - 850 to 2100MHz with FME Connector

Using 3G wireless Internet in certain areas may require the help of an antenna to boost the signal for a reliable flow of data. Both of these antennas feature a very strong magnetic base so you can fix it to the roof of your car or any other steel surface. They both support frequency ranges of 850, 1900, and 2100MHz. The cable is terminated with an FMF connector.

- 5DBI 2M CABLE CAT AR-3310 7DBI 3M CABLE CAT AR-3312



960mm



7	Gain	Cable	Antenna	Cat.	Qty 1+	Qty 4+	Qty 10+
	5dBi	2m	300mm	AR-3310	\$49.95	\$44.90	\$39.90
	7dRi	3m	960mm	ΔR-3312	\$69.95	\$62.95	\$55.95

Omni-directional Mast Antenna - 3G Cellular

This unit is ideal for enhancing fringe mobile phone reception or 3G internet performance, say a farm or a boat. It provides a very handy 7dBi of gain in any direction. The fibreglass mast (only 69cm high) is supported by an aluminium support piece which includes two sturdy pipe clamps. The cable is factory-terminated with an FME connector. (Other connectors and adaptors available separately.) Very well made.

- Frequency range: 800 to 2100MHz Overall antenna length 1.05m approx.

Note: Cable not included. Use 5m extension cable WC-7820





AR-3316

1050mm

7	Gain	Antenna	Cat.	Qty 1+	Qty 4+	Qty 10+
	7dBi	1050mm	AR-3313	\$89.00	\$79.95	\$70.95
	Low Loss Exter	nsion 5m	WC-7820	\$34.95	\$31.45	\$27.90

FME Adaptors

Certain USB modems and 3G capable mobile phones use very small antennas or none at all. Though it's convenient and compact, the full potential of the devices will be limited in areas that yield a poor signal for wireless Internet. This adaptor will stick onto the USB modem or phone case and provide an FME connection for use with 3G antennas (AR-3310 or AR-3312). The process of induction is used to transfer the signal wirelessly to the device's receiver. Adaptors available to suit popular modems.

FME ADAPTOR FOR INDUCTION 3G PLUG Cat. AR-3316 FME ADAPTOR FOR HUAWEI E160/618 PLUG Cat. AR-3318 **FME ADAPTOR FOR SIERRA 312U PLUG** Cat. AR-3317





Cat. WC-7820

7	Adaptor for	Cat.	Qty 1+	Qty 4+	Qty 10+
	Induction 3G	AR-3316	\$16.95	\$14.95	\$13.35
	Huawei E160/618	AR-3318	\$16.95	\$14.95	\$13.35
	Low Loss Extension 5m	WC-7820	\$34.95	\$31.45	\$27.90
	Sierra 312u NEW	AR-3317	\$16.95	\$14.95	\$13.35



NETWORK SWITCHES

8 Port 10/100 N-Way Switch

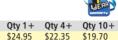
This high performance, 8 port, 10/100 N-Way switch is a cost effective means of increasing network performance by reducing network congestion. The switch achieves this by managing the transmission of data packets on the network and sending them to individual computers instead of broadcasting them to all the computers connected like ordinary hubs do. This packet management enables simultaneous connections to be made between several machines without interfering with data being exchanged on the other connections. This process improves the overall transmission speed and network efficiency to accommodate high bandwidth applications.

Comprehensive front panel indicators show connection

status and activity.

• Power pack included.

Specifications	
No. of Ports	8
Buffer Memory	256kB
Max Cable Length	100 metres
Transmission Speed	10/100Mbps
Standards Compliance	IEEE 802.3x and IEEE 802.3u
Size	159(W) x 103(D) x 27 (H)mm



8 Port 10/100/1000 N-Way Gigabit Switch

High performance 8 port, 10/100/1000 N-Way switch offers a cost-effective means of increasing network performance and reducing congestion. The switch achieves this by managing the transmission of data packets on the network and enables simultaneous connections to be made between several machines without interfering with data being exchanged on the other connections. The switch also supports auto-negotiation which allows each port to be operated at a different speed while maintaining maximum throughput

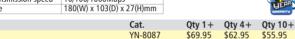
YN-8084

Comprehensive front panel indicators show connection status and activity.

• Plugpack included.







NETWORKING SERVER

4 Port USB 2.0 Networking Server

Bypass the complications of device sharing and access your USB devices directly through your network. Plug this device into your router with a Cat 5 cable then plug in a USB powered product and computers will be able to see and use your USB gadgets from any computer. Connecting

to a wireless router will provide wireless access to USB for those who can't run any Cat 5 in the home or office network. Ideal for printers, scanners or access to your external hard drives

- Trouble free installation for XP, Vista, Mac OS X
- Embedded Ethernet 802.3/3u transceiver, compliant with 100BaseTX and 10Base-T PMD level standards
- Supports up to 4 devices at the same time
 Cable not supplied

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8406	\$69.95	\$62.95	\$55.95

Networking USB 2.0 Server

Hardwired PC peripherals can be difficult to share from one computer to the next. Fiddling around with hard drive file sharing or printer network sharing can be a hassle. Now you can bypass the complication and access your USB devices directly through your network. Plug this device into your router with the supplied Cat5 cable then plug in a USB powered product and computers will be able to see and use your USB gadgets from any computer. Connecting to a wireless router will provide wireless access to USB for those who can't run any Cat5 in the home or office network. Ideal for printers, scanners, or for access to your external hard drives.

Common features

- Supports USB 2.0 and 1.1 devices
- Supports Windows Vista Rally technology
- Supports Windows 2000/XP/Vista Dimensions: 52(W) x 25(H) x 53(D)mm
- Share 1 USB device through your home or office network



\$53.95

Ethernet over Power - 200Mbps

ETHERNET OVER POWER

Installing Cat5 cables through your house can be messy and cumbersome, not to mention expensive. If you don't have the time for crimping cables and installing wallplates, Ethernet over the existing power cables is a great solution. The device will convert Ethernet packets from the Ethernet port to powerlines communication packets (PLC packets), which run on regular home power lines, then converts them from PLC packets back to

Ethernet packets. Running on the HomePlug AV standard, you can connect a PC to a PC. a PC to a xDSL modem/router or a wireless access point to a xDSL device and enjoy up to 200Mbps connection speed. To ensure the best speeds over the line try to minimise the number of "noisy" appliances connected and avoid connecting via a filter/surge

powerboard. If no Ethernet cable is connected, sleep mode will be engaged to conserve power. Two 115mm Cat5 cables are included for connection from the EoP device to your PC or other networking product.

Specifications	
Encryption	128-bit AES Link Encryption with key management
Data link protocol	HomePlug AV
Data rate	Up to 200Mbps
Operating temperature	0-40 deg C
Dimensions	115(L) x 59(W) x 26(H)mm





7	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8350	\$129.00	\$115.95	\$102.95

POWER OVER ETHERNET

PoE Passive Kit 2.1mm DC RJ45

PoE (Power Over Ethernet) is a technology that allows transfer of electrical power, along with data, over twisted pair cables. Finding a power supply is a common obstacle in LAN installations: PoE allows you to power wireless access points or other equipment via a Cat 5 cable without the need to have a separate power source available. You simply connect a plugpack of the required voltage via the 2.1mm DC connector, then tap it where you need it at the other end. Kit includes power input lead with 2.1mm DC socket and power output lead with 2.1mm DC plug. Adaptors available seperately to convert the 2.1mm DC

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8410	\$19.95	\$17.70	\$15.70

BLUETOOTH® DONGLES

Tiny Bluetooth® Dongle

plug and socket to 2.5mm.

Don't be fooled by its tiny size. This little beauty has all the functions of large adaptors but will sit almost unnoticed in one of your notebook's USB ports. Just 23mm long, including the USB connector.

- Range up to 10m
- 3Mbps Dimensions: 21(L) x 15(W)mm



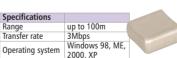




Cat. XC-4892

Class 1 Long Range Bluetooth® Dongle

Long range wireless connectivity. Communicate with phones, PDAs, headsets and other devices. Fast data transfer, V1.1, V1.2 and V2.0 compliant, Class 1.







Cat. Qty 4+ Qty 10+ XC-4896 \$17.70

BUY IT ON THE WEB...

Shop for all these Javcar Electronics products online at our website - and check out our latest products and special offers!



\$59.95

YN-8400

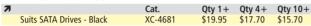
290

EXTERNAL HDD ENCLOSURES

2.5" HDD Enclosure for IDE or SATA Drives - USB 2.0

Instantly add gigabytes of storage to your computer or move large amounts of data from one computer to another. This external hard drive case has a USB 2.0 interface and will accept a standard 2.5" hard drive. The precision case does away with the awkward ribbon cable and the hard drive easily connects straight onto the PCB mounted connector. When fitted with a hard drive, this unit makes an ideal backup device or could even be used as a portable digital image storage unit. Comes complete with a handy carry pouch, USB cable, drivers for Win98 (no drivers needed for later versions of Windows or Mac OS 9+), and a screwdriver for drive installation.





2.5" SATA HDD **Enclosure - USB 3.0**

Take advantage of the massive speed increase of USB 3.0. Slot your 2.5" SATA HDD into this compact enclosure and when connected to a USB 3.0 port of a computer you will experience speeds up to 10 times faster than USB 2.0. Installation is easy, just slide the covers off and pop in the drive then secure everything with the supplied screws.

- Includes one 1.1m USB 3.0 Micro B - to Male A cable
- Locking screws included
 Dimensions: 77(W) x 113(L) x 14(D)mm



3.5" SATA HDD **Enclosure - USB 2.0**

Accommodates a 3.5" SATA drive up to 3TB in storage capacity. Lightweight aluminum case for increased portability.

- USB 2.0 transfer rate up to 480Mbps
- Dimensions: 117(W) x 183(D) x 50(H)mm

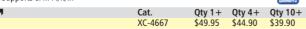


7	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4669	\$34.95	\$24.35	\$20.70

3.5" SATA HDD Enclosure - USB 3.0

Backup your data faster and carry it in style with this slick, black external HDD enclosure. Wait less do more, a USB 3.0 connection transfers data between computer and device up to ten times faster than a USB 2.0 connection. SATA I/II/III support means you can take advantage of the latest HDDs on the market or make use of your old, disused SATA HDDs. Installation is easy, just two screws to remove the back panel and no cables inside. Supplied with a desk stand and power supply.

- Plug 'n' Play
- Hot swappable
 Use with Win XP/Vista/7 for USB3.0, transfer rate up to 5Gbps
 Use with Win 98SE/2000/Mac/Linux for USB2.0,
- transfer rate up to 480Mbps
- For 3.5" HDDs only (not included)
- Supports SATA I/II/III



DOCKING STATIONS

USB 2.0 & eSATA SATA HDD Docking Station

Allows you to dock any 2.5" or 3.5" SATA hard drive for easy transfer of files through USB 2.0 or eSATA. Just slide the hard drive into the dock and it will

mount as an available volume on your Windows or Mac OS operating system. A great tool for those who regularly clone drives or need to easily swap or check the contents of SATA drives. Supports hard drive hot swapping (dependant on operating system support)

- 1 x 1m eSATA Cable
 1 x eSATA Bracket Cable
- 1 x 290cm 5-pin male mini USB to regular Male USB 1 x Dual 12V / 5V power supply
- Up to 480Mbps transfer rate with USB 2.0
- Up to 3Gbps transfer rate with eSATA
- 165.5(W) x 110(L) x 102(D)mm
 Supported in Windows and
- MAC OS 9.X or higher.



Hard Drive & Laptop not included



XC-4690 \$49.95 \$44.90 \$39.90

USB 3.0 Dual 2.5/3.5" SATA HDD **Docking Station**

Hard drive docking stations provide PC users with the ability to quickly and easily backup valuable data, access old drives, clone, format and debug disk problems. They're a great tool to have around the home or office. This unit provides two SATA docking ports that can accommodate either two 3.5 or 2.5 inch SATA drives or one of each depending on your application. It is USB 3.0 ready so all your disk operations will perform up to ten times faster than on older USB 2.0 docks. High speeds and the convenience of dual docks means less time backing up.

Dimensions: 130(W) x 61(H) x 103(D)mm



Hard Drive not included

Cat. Otv 10+ XC-4697 \$99.00 \$88.95

USB 2.0 & eSATADual HDD 2.5"/3.5" **SATA Dock with Offline Clone Function**

An easy way to clone drives. This dual SATA dock will accept 2 x 2.5" or 2 x 3.5" (or one of each) SATA HDDs/SSDs. Just dock a drive with a complete install of an operating system, dock an empty drive and press the big red clone button. It can also be used as a regular SATA dock for quickly grabbing data off your collection of SATA drives. The unit has one of each of the following: an eSATA port and cable, USB port and cable and a power supply.

- Supports SATA 1.5Gbps/3.0Gbps speed negotiation (3.0Gbps requires the eSATA connection)
 Supports hot swapping (operating system dependant)
- Compatible with Windows98/Me/2000/XP/Vista/7/MAC $05.9^{\circ} x/10x$
- USB 2.0 or eSATA connection to PC
- Dimensions: 125(L) x 112(W) x 60(H)mm



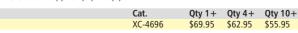
Hard Drives not included

Qty 4+ Qty 10+ XC-4695 \$79.95 \$71.95 \$63.95

USB 3.0 SATA 2.5"/ 3.5" HDD Dock

A 2.5"/3.5" SATA dock for USB 3.0 enabled desktop PCs and laptops. USB 3.0 boasts theoretical speeds of up to 4.8Ghps, that's ten times faster than its USB 2.0 predecessor. Such an exponential improvement makes buying USB 3.0 transfer devices such as docks and external drives a no-brainer. SATA docks are particularly useful for computer technicians, IT professionals and those of you who download a lot and need to swap between drives frequently. With USB 3.0 transferring gigabytes of files around will be significantly quicker so you can get back to what you love doing most, downloading more

- Backwards compatible with USB 2.0
- Compatible with Windows XP/Vista/7/Mac 9.X and higher
- USB 3.0 cable included
- Dimensions: 145(L) x 94(W) x 82(H)mm









DOCKING STATIONS (CONTINUED)

IDE to SATA HDD Upgrade Panel

Clip this onto the end of an old 3.5" IDE hard drive and the drive can then be used in our SATA HDD docks or inside personal computers that lack IDE data and power connectors. A simple method for upgrading IDE drives.

- Dimensions: 105(W) x 25(H) x 62(D)mm
 Compatible with: Maxtor, Samsung, IBM, Hitachi, Seagate Hard drives





Qty 10+ XC-4970 \$24.95 \$22.35 \$19.70

2 x eSATA + 2 x Male Molex Front Panel

Leave USB 2.0 in the dust and add this front panel to your PC for the convenience of two eSATA ports and two male Molex plugs. eSATA gives speeds that are up to 6 times faster than USB 2.0 so there's no reason to use your external hard drives on a USB 2.0 port anymore. Two SATA cables and one female Molex connector (not supplied) are required to connect to your motherboard. With the front panel, SATA hard drives can be operated external to your PC by using an eSATA to SATA cable (PL-0757) and a female molex to SATA power cable (not supplied).

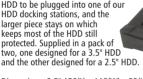
• Dimensions: 11(W) x 25(H) x 97(D)mm

Qty 4+ Qty 10+ XC-4699 \$14.95 \$13.35 \$11.70

Silicone Hard Drive Protectors

These silicone hard drive protector sleeves provide a layer of cushion against shock and impact for either a 3.5" or 2.5" hard disk drive (HDD).

They are a two piece design with the smaller piece removable to enable the HDD to be plugged into one of our HDD docking stations, and the larger piece stays on which keeps most of the HDD still protected. Supplied in a pack of two, one designed for a 3.5" HDD





XC-4650



DID YOU KNOW...

History of the Computer...

To reach today's era of artificial intelligence, natural language processing and high-power processing, computer inventions had to go through various generations.

- All started with Charles Babbage's difference engine in 1822. The difference engines and analytical engines (if completed) would be heavily mechanical.
- The main feature of the first generation (1940 1956) computers was vacuum tubes.
- The architecture of second generation (1956 1963) computers was based on transistors.
- Third generation computers (1964 1971) saw the introduction of integrated circuits.
- And fourth generation (1971 present) computers are based on microprocessors.
- And now, we are in the fifth generation (present henceforth) of computers, where artificial intelligence takes precedence.

Freecall order hotline: 1800 022 888

HDD POWER SUPPLY

12V/5VDC 2A IDE/SATA **HDD Power Supply**

For most people, hard drive rack arrays in the house aren't a feasible option so old hard drives tend to go unused. If your computer is equipped with an e-SATA port you can power up and connect those hard drives with ease and start transferring, formatting or cloning drives without opening up the PC. This product is ideally suited for use with our e-SATA front panel (XC-4699) and our SATA to e-SATA cable (PL-0757). It features a SATA power connector in addition to a 12VDC male Molex plug for use with IDE drives. An IDE drive can also be used externally if you have a IDE to SATA upgrade panel (XC-4970).

Also features power switch.



HARD DRIVE POWER CABLES

SERIAL ATA / SATA / eSATA Power Cables

A range of SATA and eSATA data/power cables for use with personal computers and external serial ATA devices.

4 PIN POWER SPLITTER CABLE

Standard 4 pin power splitter for PC
• 1 x HDD plug to 2 x HDD sockets

Cat. PL-0750



SERIAL ATA LEAD 7 PIN PLUG

Use this 7pin cable to transfer data between your Serial ATA hard drive and serial ATA interface, at rates up to 150Mbps. Thinner, smaller and more versatile than the Parallel ATA Standard.



Colour: Red Length: 1 metre

Cat. PL-0980

STRAIGHT TO RIGHT ANGLE SATA

Colour: Red Length: 1 metre Cat. PL-0981

eSATA CABLE

Supports data transfer rates up to 3Gbps

Colour: Maroon Length: 2 metres Cat PI-0982

eSATA TO SATA

Allows you to connect eSATA devices to regular SATA ports. Colour: Red Length 0.9 metre Cat. PL-0757

HDD POWER TO 2 X SATA

Power two SATA devices from one 4-pin male Molex connector Length: 200mm Cat. PL-0759

HDD POWER TO 1 X SATA

Power a SATA devices from a 4-pin male Molex connector Length: 200mm

2.5" TO 3.5" IDE NOTEBOOK HDD ADAPTOR

2.5" to 3.5" kit with bracket and screws. Hard Drive Computer Adaptor



7		Cat.	Qty 1+	Qty 4+	Qty 10+
	HDD power to 2 HDD Sockets	PL-0750	\$4.95	\$4.45	\$3.90
	SATA to SATA	PL-0978	\$5.95	\$5.25	\$4.75
	SATA to SATA	PL-0980	\$7.95	\$6.95	\$6.25
	SATA RA to SATA	PL-0981	\$7.95	\$6.95	\$6.25
	eSATA to eSATA	PL-0982	\$6.95	\$6.25	\$5.50
	eSATA to SATA	PL-0757	\$4.95	\$4.45	\$3.90
	HDD power to 2 x SATA power	PL-0759	\$7.95	\$6.95	\$6.25
	HDD Power to SATA	PL-0758	\$5.95	\$5.25	\$4.75
	2.5" to 3.5" IDE Notebook	PL-0754	\$12.95	\$11.35	\$10.35

Converter & Switch Boxes

SWITCH BOXES

VGA/Audio Splitters

Takes a computer's VGA and audio signal and sends it to two (2) analogue monitors and headphones/speakers via Cat5 cable. The same image is displayed on both monitors and identical audio streams are piped to each 3.5mm audio jack. The splitter provides fast, flexible solutions for test bench facilities, data centres or video broadcasting such as remote monitoring, presentations, education and stock quotes etc. Supports VGA, SVGA, XVGA and Multi-Sync. Mains power adaptor included.

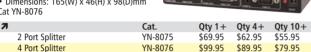
2 PORT VGA/AUDIO SPLITTER

- Bandwidth up to 500MHz
 Resolution up to 1920 x 1200 and 1080p
 Transmit video/audio up to 15m
- Includes a 1.8m male to female VGA cable
- Dimensions: 125(W) x 25(H) x 72(D)mm

4 PORT VGA/AUDIO SPLITTER

- Bandwidth up to 500MHz
- Resolution up to 1920 x 1200 and 1080p
- Transmit video/audio up to 15m
- Includes a 1.8m male to female VGA cable Dimensions: 165(W) x 46(H) x 98(D)mm





Keyboard Video Monitor (KVM) Switch - 2 Port USB

KVM switches allow you use one keyboard, mouse and monitor to control several computers. These switches are designed to allow IT administrators to control servers which don't require their own monitor or keyboard etc but are just as suited to the power user who has more than one computer on their desk

- PC Port Connections:
 Keyboard / Mouse (or other): USB 2.0
- Monitor: D15HD

- Console Port Connections:
 Keyboard / Mouse (or other):
- 2 Port: USB 2.0 x 2

Specifications	
Max Resolution	1920 x 1440 pixels
Video Bandwidth	250MHz

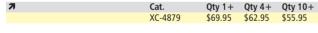


CONVERTERS & ADAPTORS

USB to DVI Adaptor

Enabling the addition of up to six extra displays, this adaptor allows you to add high-resolution graphics without having to add a graphics card - just connect it to any USB 2.0 port. Ideal for gamers, conference or AV rooms, POS systems or industrial applications.

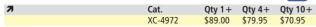
- Video output with HDMI connecter
 Supports DVI video output via HDMI-DVI adapter
- Easily connects additional monitors using a USB 2.0 cable
- Mirror or extend computer display workspace
 Resolution: up to 1,920 x 1,080 pixels at 32-bit colours
- · No external power supply needed



USB to 1080p HDMI

Add a HDMI port to your computer with this convenient adaptor. Has numerous possibilities for home theatre, conferences, finance industry, point of sale marketing in shopping centres etc. You can mirror your current display or extend your desktop display for more screen real estate and multitasking. Install the driver, connect the device to your USB 2.0 port then connect to your extra display and away you go. Please note that this product is not suitable for graphically intense games.

- Add up to 6 extra displays to a PC (requires 6 adaptors)
 Video resolution: 1,600 x 1,200 and 1,920 x 1,080 pixels (maximum)
- Output: HDMI with audio and DVI with supplied HDMI-DVI adpator Compatible with Windows XP, Vista, Windows 7
- Dimensions: 106(L) x 48(W) x 18(H)mm



VGA to Composite & S-Video Converter

A compact and versatile device that lets you use your wide screen plasma or LCD screen as a computer monitor for gaming or presentation use.
The unit accepts a standard VGA input and generates both composite video and S-Video signal simultaneously, so you can watch and record the video signal at the same time or even send it over a video distribution system. Great for watching DVDs, gaming, presentations, or just having a big screen on your computer. The unit is powered from the computer's USB port and has an on-screen setup menu to adjust the video output signal and picture size No software is required



- Display on both PC and TV simultaneously
- Input and output leads included Powered from USB Port
- Dimensions: 100(L) x 130(W) x 22(H)mm

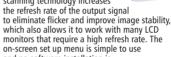
1	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4871	\$89.95	\$80.95	\$71.95

Stand provided for

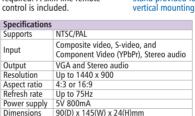
T at DE

Component/Composite Video to VGA Converter

This compact converter box accepts a range of video input signals and converts them to VGA specification for use on CRT, LCD and video projection systems. The converter also has YPbPr (component video) input for connecting DVD players Xbox®, Wii®, or other hi-resolution video sources up to 1080i. Advanced scanning technology increases



and no software installation is required. A slim line remote control is included.





Cat. Otv 10+ XC-4873 \$99.00

Remote PC Control Over Ethernet Adaptor 1080p

If you face the common problem of having your PC in one room and your flat panel TV in another and you want to watch films or browse the net or play PC games on your TV then this is the device you need. The adaptor connects to your PC over your network with a Cat 5 cable at a distance of up to 100m, and requires an extra 5VDC of power which can come from a USB power supply or a USB port on a PC. The adaptor has 2 x USB ports so you can plug in a keyboard and mouse for full control over your files or games, and has 3.5mm sockets for audio and microphone. Up to 4 PCs can be remotely controlled with the one adaptor providing each PC has the USB host software installed and running. The display from your PC can be mirrored, extended in any direction or rotated.

Recommended accessories DVI to HDMI cable Wireless Trackball Keyboard Mains USB power supply

Cat WO-7407 Cat XC-4941 Cat MP-3455

- Includes 1 x 937mm USB A Plug to USB Mini plug
- Includes 1 x DVI to VGA adaptor Includes 1130mm Cat 5E cable
- Features 2 x 3.5mm sockets one for audio and the other for microphone Allow you to remotely control your PCs with a set of keyboard/mouse,
- a monitor and a network connection Compatible with 10/100Mbps Ethernet specification
- Supports Microsoft Windows XP, Vista,
- Dimensions: 120(L) x 57(W) x 21(H)mm











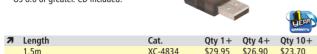
CONVERTERS & ADAPTORS (CONTINUED)

DB9M RS-232 to USB Converter

This USB to 9 pin Serial (RS-232) converter allows a computer with a USB port to use any RS-232C serial device via the USB port. Suitable for digital cameras, modems, POS systems, ISDN terminal adaptors etc. The converter is powered by the USB port.

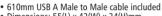
Transmit, receive and link indicators are provided.

- Full compliance with USB specification 1.1(0)
- Over 1Mbps data transfer rate
 Support remote wake-up and
- power management Supports Windows 2000, XP, Vista & MAC OS 8.6 or greater. CD included.

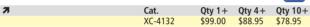


RS-485/422 to USB Converter

Wire up an RS-485/422 device to the 4 socket terminal block to give your hardware USB connectivity. It features surge protection to guard against unpredictable voltage spikes. Suitable for industrial, military, marine, science and custom built applications. USB A male to male cable supplied



• Dimensions: 55(L) x 42(W) x 24(H)mm



Serial to Ethernet Converter

With this converter, computers can connect to serial devices over Ethernet. It's an ideal solution for people who need to monitor or access RS-232 based equipment remotely or to share them over a network. There is one 9-pin male RS-232 plug, an RJ-45 socket and a terminal block to wire up RS-485 or RS-422 connections. Can be accessed remotely through a simple web interface.



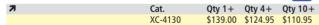


RS-232 to Bluetooth Converter

Add shortrange bluetooth wireless connectivity to RS-232 based devices. It features one 9-pin female RS-232 socket and an 11mm long SMA screw on antenna. A great way to reduce serial cable mess. Perfect for serial printers, scanners, custom built RS-232 products and a host of other devices

· Class 1 (up to 100m range)

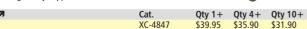
Specifications	
Antenna	11(L)mm - SMA plug
Led Indicator	SYS (Power) , Pairing
Dimensions	72(L) x 30(W) x 14(H)mm



Parallel to USB Bi-Directional Cable

Parallel printer ports have disappeared from most modern desk top computers and virtually all new notebook computers. This is not a problem if you have a USB printer, but many people still want to use their parallel printer or other parallel port devices such as ZIP drives or external CD-ROMs etc. This handy device replicates devices such as 21r drives or external CD-KOMS etc. This handy device replicates the old 25 pin printer socket and lets you use your legacy devices just like you would with a normal printer port. The USB interface provides up to 12Mbps data throughput, so printing is significantly faster compared with a standard parallel port (150kbps) connection.

- USB Printer Class Specification 1.0 compliant
- IEEE-1284 1994 (Bi-directional parallel interface)
- Cable Length: 2 metres
- USB 1.1 Compliant A type male connector
- Compatible with Win 2000, XP and Vista
- Plug & Play support



Video Data & Power to Cat5 Combiner

Combine composite video, data (RS422, 485) and camera power over one standard Cat5 cable

- 2.5mm DC socket
- Male BNC with mini-coax flying leads to RJ-45 socket
- Transmission range: 300m colour / 600m B&W

 • PTC fuse for short circuit protection
- Length 330mm
- Supplied as a pair

7	Cat.	Qty 1+	Qty 2+	Qty 4+
	QC-3433	\$49.95	\$44.90	\$42.45

IDE & SATA to USB Hard Drive Adaptor

A must have tool for PC technicians! This clever device will allow you to use an ordinary IDE or SATA disk drive on a USB 2.0 interface. You can even connect an IDE drive and a SATA simultaneously and transfer data between them. The adaptor and hard drive can be powered from the USB port for smaller (2.5") hard drives. An external power supply is included to power larger (3.5" & 5.25") drives. The adaptor has plug & play support for Windows ME, 2000, and XP. Interface cables included.



Supports:

\$23.70

- 2.5" IDE HDDs 3.5" IDE HDDs
- 3.5" SATA HDDs
- 5.25" IDE CD / DVD Drives

Note: HDD not included



Qty 10+ XC-4833 \$49.95 \$44.90 \$39.90

USB 3.0 to 2.5/3.5" HDD/SSD SATA Adaptor

If you are a downloading enthusiast or an IT professional who has accumulated a number of hard drives over the years and want a simple way to access them temporarily this adaptor is the perfect tool. When used with most enclosures and adaptors, SATA hard drives and solid state drives are limited by the speed of USB 2.0. This new USB
3.0 adaptor will take full advantage of the max speed of SATA (3.0Gbps) Transfer files or clone drives in a fraction of the time. Please note your PC must have a USB 3.0 port to support these speeds. Power supply included.

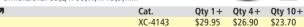
- Fully compliant with USB 3.0 specifications
- Supports up to 2TB Drives
- Backward compatible with USB 2.0
 Compatible with Windows 98/ME/2000/XP/Vista/Win 7/MAC OS 9.X/10.X/Linux
 • Dimensions: 70(L) x 39(W) x 11(D)mm

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4145	\$59.95	\$53.95	\$47.90

PCI-E USB3.0 Interface Card

Slot this PCI-Express card into your motherboard for 2 x USB 3.0 ports and reach speeds of up to 4.8Gbps, ten times faster than USB 2.0. Transfer times on hard drives and other storage platforms that support USB 3.0 will be significantly quicker. A cost effective upgrade for your desktop PC that will give compatibility for the next-generation of USB products. The card has one Molex power connector.

- Backward compatible with USB 2.0/1.1 products
 Compatible with Windows XP, Vista, 7 (32-bit and 64-bit)
 Dimensions: 85(L) x 66(W) x 15(D)mm



2 x USB 3.0 Port Upgrade Kit

LJEAR

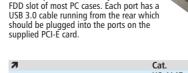
Add two USB 3.0 ports to the front of your desktop PC for compatibility with the next generation of superfast USB 3.0 hard drives, flash drives and other assorted peripherals. The front panel will fit neatly into the 3.5" FDD slot of most PC cases. Each port has a USB 3.0 cable running from the rear which







Freecall order hotline: 1800 022 888



i

Converters & Adaptors

DISPLAY CONVERTERS & ADAPTORS

Mini DisplayPort® and USB Audio to HDMI Converter

Seamlessly connect video and audio up to a large flat screen TV from a DisplayPort® equipped device. Many of Apple's® products on the market today use mini DisplayPort® for connecting to external displays, but many displays will only accept HDMI input. The problem is solved with this device as it converts DisplayPort® and analogue audio through a USB port to a HDMI port.

Converts video and audio to HDMI Supports iMac®, Mac® Mini, Mac® Pro, MacBook® Air and numerous other

Apple® products
Mini DisplayPort® 1.1a and USB 2.0

HDMI standard output

Powered from mini DisplayPort® and USB port
Resolutions: 480p, 720p, 1080i, 1080p
Supports HDMI 12 bit per channel (36 bit all channel) deep color

Supports uncompressed 2 channel audio such as LPCM

Lead length: 575mm

• Unit dimensions: 79(L) x 55(W) x 11(H)mm



Mini DisplayPort® to DisplayPort®/HDMI/DVI Converter

Combine several mini DisplayPort® converters into one with this useful unit. Easily converts to high definition displays that take HDMI, DVI or DisplayPort®. Fully powered from the mini DisplayPort® of your input device. A useful tool to use with your MacBook® Air or other Apple® device when wanting to output to a large screen TV.

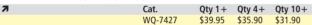
Ouput types: DisplayPort® Female Type A 20pin, HDMI Female Type A, DVI Female (24+1)
 Supports DisplayPort® 1.1a
 HDMI can support audio output for iMac® and MacBook® Pro

HDMI/DVI output up to 1920 x 1080p @ 60Hz

Display it auto detected
DisplayPort® 1.1a Dual-mode output with max resolution of 2560 x 1600

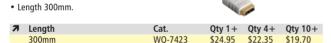
Lead length: 180mm

Unit Dimensions: 78(L) x 44(W) x 15(H)mm



Converter Lead Mini DVI Plug to HDMI Socket

Converter Lead Mini DVI Plug to HDMI Socket



Mini DisplayPort® to VGA Converter

Connect modern computers with a Mini DisplayPort to a conventional VGA display, such as CRT, LCD monitor or projector. Mini DisplayPort® offers a unified, scalable, and cost effective interface for embedded and external display applications.

. Mini DisplayPort® 1.1a compliant

 Supports up to 1080p, 1920 x 1200 video resolution

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	WQ-7440	\$29.95	\$26.90	\$23.70

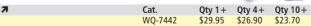
Mini Display Port to **HDMI Lead for MAC®**

Connect your MAC® to a high definition display with this mini display HDMI lead.

· Length: 1.8m.

Designed for MAC® computers

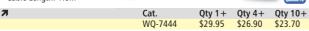
· Plug and play



Mini DisplayPort® to DVI Video Cable - 1.8m

Converts the Mini DisplayPort® on a MAC® or other Apple® product to a standard DVI connector, which can connect to a standard monitor

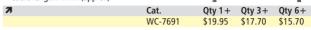
• Cable Length: 1.8m



USB to Apple® Connector/USB Micro B and Mini B Cable

A versatile USB cable that can connect to an Apple® iDevice, or anything that features a micro or mini USB socket. The t-shaped end of the cable features a USB mini and micro plug on either side as well as an Apple connector that can piggy back off the mini USB plug.

• Cable length: 1.1m (approx)



DVI to VGA, Digital to Analogue Signal Converter

Still in use today are many older computer displays and projectors which accept analogue VGA inputs only. You've probably kept yours because it is in good working order, but if you have upgraded to the latest computer, chances are the video card inside only supports a digital DVI output, rendering the two incompatible. Not so with this converter. It converts the digital signal from your video card to an analogue signal suitable for use with your existing VGA display or projector.



Supports HDCP 1.2

165MHz/1.65Gbps per channel (6.75Gbps all channels) bandwidth for DVI input

Supports analogue video output up to UXGA and 1080p with 10-bit DAC

Weight: 0.68kgs
 Dimensions: 88(L) x 68(W) x 25.5(H)mm

Signal inputs/outputs:
• Input video signal: 0.5-1.0V p-p
• Input DDC signal: 5V p-p (TTL)

Input connection: DVI female (24+1)

Output connection: VGA

Output commetcion: VdA
DVI video input format: 480i/576i/480p/576p/720p/1080i/1080p
VGA video output format: 480i/576i/480p/576p/720p/1080i/1080p

Operating frequency

Vertical frequency range: 50/60Hz Input video amplifier bandwidth: 1.65Gbps/165MHz

Qty 1+ Qty 4+ Cat. WQ-7445 \$59.95 \$53.95

VGA to DVI, Analogue to Digital Signal Converter

Current computer LED displays support digital DVI inputs only, however many small form factor PCs and older computers use video cards with analogue VGA output only. Use this converter to convert the analogue signal from your video card to a digital signal suitable for use with the latest LCD or LED display.

Converts analogue VGA signal to digital DVI signal
 Supports a maximum display resolution of 1280 x 1024
 165MHz/1.65Gbps per channel (6.75Gbps all channel) bandwidth
 8-bit per channel (24-bit all channels) deep colour

Signal inputs/outputs: Input video signal: 0.5-1.0V p-p Input video: VGA (female) Output video: DVI (female 24+1) VGA resolution:

HEHR

640x480 at 60/75Hz 800x600 at 60/75Hz 1024x768 at 60/75Hz 1280x768 at 60/75Hz

1280x720 at 60/75Hz 1280x960 at 60/75Hz 1280x1024 at 60/75Hz

Operating frequency: - Vertical frequency range: 50/60Hz Video amplifier bandwidth: 1.65Gbps/165MHz

Dimensions: 88(L) x 68(W) x 25.5(H)mm

Qty 4+ Qty 10+ WQ-7446 \$53.95

BRACKET/STAND FOR iPAD®

Bracket Stand for iPhone®/iPad®/Android

A convenient tripod stand for a Tablet and Smartphone, including iPhone®, iPad® and Android devices. The middle leg of the stand can be adjusted to set the angle at which the device sits. Lightweight and versatile.

 Dimensions: 110(H) x 43(W) x 38(D)mm



Cat. Otv 6+ \$11.35 HS-9018



iPhone® not

included

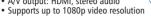
iPhone[®] not included

DOCKING FOR iPOD®, iPAD®, iPHONES®

HDMI Docking Station for iPad®/iPhone®/iPod® with Remote

Play slideshows or movies from your Apple® device on the big screen by connecting the dock with a HDMI compatible display device. Features HDMI video output, audio jack and USB port designed to keep your device synchronised and powered for hours of entertainment. The docking station also includes a full functioning IR remote control and two silicone cases to protect your device.





Audio & HSB cable included

Compatible with iPad®, iPad2®, iPhone® 3GS/4, iPod® nano 4th Gen up, iPod® touch 1st Gen up

Dimensions: 72(W) x 68(L) x 28.5(H)mm





AV Docking Station for iPhone®/iPod®

This docking station allows you to connect your audio and video devices with your iPod® or iPhone®. Share and play your music, pictures and videos on your TV, monitor or home audio system. Features video output, audio jack and USB port designed to charge your device while connected The dock also comes with a full function IR remote control, AV & USB power cables.

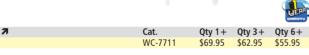
- AV output: Composite, stereo audio USB charge port Compatible with iPhone®, iPod® nano 2nd Gen up, iPod® touch 1st Gen up
- Dimensions: 88(W) x 74(L) x 19(H)mm

				_	
7	Cat.	Qty 1+	Qty 3+	Qty 6+	
	WC-7715	\$49.95	\$44.90	\$39.90	

HDMI AV Cable for iPad®/iPhone®/iTouch®

Extend your multimedia capabilities with your Apple® devices by connecting it to a large screen TV, projector or even your home theatre audio setup. The cable uses HDMI plug that streams audio and video to the big screen. Support movies and photo slideshows with video resolution up to 1080p.

- Compatible with iPad®1 & 2, iPhone®4/S, iTouch® 4th Gen
 • Supports movies and slideshows
- Video resolution up to 1080p
- Cable length: 1.8m

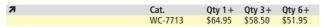


HDMI Converter for iPad®/iPhone®/iTouch®

Stream audio and video to your big screen TV from your Apple® device via HDMI connection. Share and play your favourite songs, videos and photos on your TV or monitor. The USB port allows you to synchronize and charge your device for non-stop entertainment.

- Supports up to 720p video resolution
- Compatible with iPad®, iPad®2, iPhone®4, iTouch® 4th Gen
- Dimensions: 157(L) x 116(W)mm

not included



Portable Stereo Speakers/Charger with Docking Station for iPhone®/iPod®

Portable and versatile, these speakers are suitable for use in your bedroom, study or on the go. Dock your iPhone®/iPod® into the docking station to charge and enjoy high quality stereo sound from your device. It even has a 3.5mm audio jack for use with all your other favourite personal media devices.

Completely portable, the docking cradle tucks neatly into place to avoid damage and will operate on 4XAA hatteries. An AC/DC adaptor has been included in case you run out of juice and to use the speakers as a standalone charger. It's perfect for get-togethers with family and friends or for setting the mood on that perfect picnic date.



not included

- Apple licensed product
- Dual 2" full range drivers
- Total output power (RMS @ 10% THD): 4W Power per channel: 2W
- 3.5mm jack for use with personal media players than an iPhone®/iPod®
- Includes Apple proprietary connector for data sync or charge via computer Accepts 4 x AAA batteries for portable use
- (does not charge iPhone®/iPod® in this mode) AC/DC adaptor for standalone charging
- Dimensions: 256(W) x 115(H) x 70(D)mm

7	Cat.	Qty 1+	Qty 2+	Qty 4+
	AR-1889	\$69.95	\$62.95	\$55.95

Docking Station and Dual Charger for iPad® and iPhone®/iPod®

Charging your iPad® and iPhone®/iPod® together at the same can be a bit of a nightmare, due to a lack of space or mains charger. Not anymore. Now you can eliminate all the other clutter and charge your iPad® and iPhone®/iPod® simultaneously using this ingenius docking station. It acts as a standalone charger and docking station which allows you to connect your devices to your computer and sync with your iTunes® account.



- Easily sync one device at a time Compatible with iPad®/iPhone®/iPod®
- Power adaptor input: 9V/2A iPad® charges at 5V/2.1A
- iPhone®/iPod® charges at 5V/1A
- Weight: 0.332kg Dimensions: 170(L) x 110(W) x 30(H) mm

iPhone® not included



TEU

WC-7719 \$44.90 \$49.95

Smart Digital Pen for iPhone® and iPad®

Write or draw on paper and see it displayed simultaneously on your iPad®, iPhone® or iPhone® Touchscreen. Sketch images, graphs and write text with it saved digitally at the same time. It stores up to 100 pages in the memory and can work standalone. You can also upload the stored drawings to your PC or MAC®. Great for Artists,

Engineers, Architects, Students, and kids.



- Sensor Pen USB cable
- Receiver
- Spare Ink for Pen
- Software

- Compatibility:
 Windows & Mac® OSX 10.5 or above

included



XC-0359 \$149.00 \$133.95 \$118.95

MONTHLY SPECIALS

Look out for our monthly promotions in store now!





WEB CAMERAS

Wi-Fi Remote Wireless IP Camera

The smallest IP camera we've ever seen! With its wireless network interface, it allows you to stream and record audio video images over your network or directly to your Smartphone (iPhone® or Android® device) and laptop on the go. Powered by a CR2 battery and coupled with an incredibly compact design means you can easily carry the unit around and even put it on your keychain! Supported by various mobile and PC applications that enhance and expand your experience (including some iPhone® apps not included). Stream or record your videos from a remote location even when you are far away from the camera (even while overseas) using its infrastructure WAN mode.

Recommended upgrade: QC-3369 Cradle and adapters. QC-3369 is supplied with a mains power supply and cigarette plug so you don't have to use CR2 batteries, and is also supplied with a stand for the camera.

Specifications	
VGA	640x480, QVGA 320x240, QQVGA 160x120, up to 30fps
F2.8	QQ CONT TOOK 1207 UP to 50 (p)
View Angle	60 degree
Focusing	200mm to Infinity
Video Recorder	Motion JPEG
Typical bit rate	
(VGA)	standard (2500 kbps), high (1600 kbps)
(QVGA)	standard (1100 kbps), high (800 kbps)
(QQVGA)	standard (600 kbps), high (400 kbps)
Video Snapshot	JPEG
Wireless Interface	IEEE 802.11b/g 2.4GHz ISM Band
Wireless Security	WEP 64/128, WPA, WPA2
Wireless Range	Infrastructure: 20m (Typical), Adhoc: 7.5m (Typical)
	54Mbps, max. connection rate, Adhoc: 11Mbps,
Wireless performance*	max. Connection rate (Note: Wireless performance
	varies with distance and access point usage.)
Dimension	Weight 30mm(Diameter) x 35mm(L) / 100g
Voltage	3.0V
Power	750mAH (CR2)
Current consumption	320mA (typical); 350mA (maximum)





7	1	Cat.	Qty 1+	Qty 2+	Qty 4+
	Camera	QC-3368	\$99.95	\$89.95	\$84.95
	Cradle & Adaptor	QC-3369	\$29.95	\$26.90	\$25.45

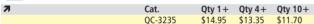
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Budget 300k Web Camera

No built-in camera on the laptop? Add one at minimal cost and podcast away. Microphone included, plug and play. Low cost solution.

- Supported in Windows XP, Vista, 7
- No drivers required
 Dimensions: 32(W) x 42(H) x 28(D)mm





MICE

3-Button Optical Mouse

A low profile, ergonomic 3-button optical mouse. Simple and easy to use.

- Resolution: 1000 DPI
- Zoom-in, zoom-out; page up, page down
 Plug and play
- · Windows and MAC compatible





A tiny 300k webcam with built-in microphone for on-thego online video conferencing or chatting. Comfortably mounts on top of a thin LCD laptop screen.

- Driverless, plug and playSupported in Windows
- Frame rate: Up to 30FPS
 Dimensions: 28(W) x 59(H) x14(D)mm





Note: Laptop not included



USB 5-Button Laser Mouse

All the normal mouse functions - left and right click, scrolling, plus forward, back and quick-launch button. Ergonomically shaped for fatigue-free use.

- Plug and play no drivers required
 Windows 2000, XP, Vista, 7



Cat.	Qty 1+	Qty 4+	Qty 10+
XM-5240	\$17.95	\$15.95	\$14.35

2MP Web Camera

Ideal for podcasting or creating your next YouTube masterpiece. No drivers required, just plug and shoot. Built-in microphone included for adding sound.

- 2MP
- Plug-and-play

7	Cat.	Qty 1+
	QC-3233	\$24.95

5-Button Wireless Optical Mouse

A compact, 5 button wireless optical mouse with nano dongle that tucks away neatly into the base. Great for travellers.

- 2.4GHz Wireless
- 1000/1500/2000 DPI conversion with indicator
- 4th and 5th buttons can be custom assigned functions after driver installation
- Multi-stage power saving modesPlug and play

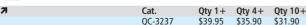
 Windows and MAC® compatible 				WARRANT
7	Cat.	Qty 1+	Qty 4+	Qty 10-
	XM-5248	\$24.95	\$22.35	\$19.70

High Resolution 720P Web Camera

Web chat in higher resolution. No drivers required, just plug and shoot. Built-in microphone included for adding sound. It can be hung over a laptop screen or used on a desk or table top.

- High resolution 720 TV lines
- Plug-and-play
 Dimensions: 58(W) x 25(H) x 48(D)mm

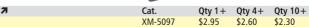




Mouse Pad

- . For all your mousing around
- Dimensions: 260 x 200 x 4mm





Black QWERTY USB Keyboard

This incredibly flat and light QWERTY keyboard is plug & play and simple to use. Change the inclination with the two stands that are discreetly tucked away on the sides.



• 2 4GHz with 8 channels / 10 metre range

keyboard so you can use it like a games console. No need for installation software

simply plug in the USB wireless receiver to your PC and you're good to go.

Wireless Trackball Keyboard

Designed for use with PC-based home theatre, this keyboard sits on your lap so you can control everything from the

couch. The trackball and scroll wheel

take the place of a mouse and the left and right mouse buttons are

located on top as well as under the

- Windows compatible
- 12 internet/multimedia hot keys
 Integrated optical trackball & scroll wheel

Requires 4 x AA batteries

71	Cat.	Qty 1+
	XC-4941	\$49.00

Qty 4+ Qty 10+ XC-5146 \$9.95 \$8.75 \$7.75

Roll Up USB Keyboard

A flexible and virtually indestructible QWERTY keyboard. The moisture-resistant silicone allows you to spill as much as you like with no effect on function. The bendable silicon allows for easy transportation and the material creates a soundless

typing experience. Perfect for industrial or wet areas such as factories, labs, workshops, restaurants, shops and food preparation areas. As it rolls up into a compact bundle, it's also ideal for

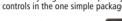
- USB powered Compatible with Windows & Mac
- Rolls up to 80(W) x 135(H)mm

			PRICE	ШЕЯК ШЯКЯЯПТИ
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-5172	\$14.95	\$13.35	\$11.70

Universal Remote Control with Keyboard

As televisions morph into fully connected displays that can perform most of the functions of a simple PC, the need for remote controls with greater functionality becomes evident. This unit combines the key layout of a standard remote for controlling TVs, Blu-ray/DVD players and when you flip it over you have a full QWERTY keyboard

with optic finger navigation for typing text into web browsers, using instant message programs on your smart TV/media player, or playing games. It is a learning remote so it's easy to give it the capability of all your remote controls in the one simple package



- 45 keys for remote 37 keys for keyboard Option finger navigation
- IR receiver Includes 2 x CR2025 batteries
- Dimensions: 167(L) x 51(W) x 15.3(D)mm

AR-1723 \$31.45 \$27.90



An all-in-one wireless keyboard and mouse solution. Features Qwerty keyboard and an ergonomically designed mouse with scroll wheel. A nano sized USB receiver is tucked into the base of the mouse for connection to your PC.



- Operating range: Up to 10m Operates on the 2.4GHz spectrum Mouse: 2 x AAA batteries (included)
- Keyboard: 1 x AAA battery (included)
- Supports Windows and MAC OSX
- Keyboard dimensions: 435(L) x 125(W) x 18(H)mm

•				
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-5174	\$24.95	\$22.35	\$19.70

USB HUBS

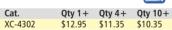
A range of USB 2.0 hubs for any budget or application. Powered by the USB port and all include a lead. Supported by the latest operating systems - Windows 7, XP, & 2000.

Budget 4 Port Star Hub

Star shaped 4 port hub. Compact design to reduce desk clutter with power indication LED.

• Dimensions: 50(W) x 50(L) x 15(H)mm





Mini Wireless Keyboard with Trackball

Perfect for use as an advanced "remote control" for your Internet enabled TV or home media PC. Navigating through web pages on the big screen from the couch will need more than your

standard up/down/left/right remote. This handy keyboard features the full QWERTY key layout and a brilliant little trackball and mouse scrollwheel. It also has those handy media shortcut keys, play, pause, fast forward/rewind and volume controls etc.

Operates on the popular 2.4GHz band for easy wireless

access. Includes nano sized USB dongle

- Features a low battery power LED indicator



Freecall order hotline: 1800 022 888

4 Port Coloured USB Hub

Five bright colours to brighten up your workspace. The end two coloured ports can rotate 180° for easy connection to USB devices positioned on either side of the hub for easy insertion of memory sticks

Dimensions: 105(W) x 21(L) x 21(H)mm





CRAZU

				шимний
71	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4300	\$14.95	\$13.35	\$11.70

Micro Thin 4 Port Hub

Not your average USB hub. Only 7.5mm thick, which is not much more than the USB sockets.

- · Ideal for the traveller or student.
- Dimensions: 74(L) x 32(W) x 7.5(H)mm



Cat.	Qty 1+	Qty 4+	Qty 10+
XC-4948	\$14.95	\$13.35	\$11.70

Hubs & Card Readers

USB 2.0 Mini 4 Port HUB

Add up to four USB peripherals without loss of speed.

• Dimensions: 83(W) x 16(H) x 32(D)mm



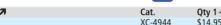
CRAZU

USB 2.0 Device Share Hub

Share a printer, external drive or any other USB device between two computers. Each computer plugs into the hub via USB cable and you switch between them using the switch on the unit or via the scroll lock key on your keyboard. No power, drivers or software required. PC or Mac.

USB-B cable required for each computer Compatible with Windows 2000, XP,

Mac OS 9.0 or later • Dimensions: 100(L) x 80(W) x 27(D)mm



USB 2.0 Powered Extension Lead with 4 Port Hub

Extend your printer or any other USB device as far as 10 metres away from your PC. A 4-port hub adds extra flexibility.

• Powered by USB from the host computer.

Note: Stock may



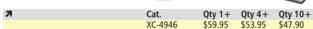
1111111111

7		Cat.	Qty 1+	
10m 4	Hubs	XC-4122	\$19.95	

USB 2.0 10 Port Hub

Ten, count 'em, ten USB ports. That should be enough for anyone. The two position switch turns all ports on, or only ports 7 - 10. This means you can turn off non-essential peripherals while maintaining power to others - LED indicators tell you which group is live. 5VDC 3A plugpack included for powered operation.

- USB 2.0
- USB or mains powered
- Key holes for wall mountingWindows & Mac OS compatible
- Dimensions: 172(L) x 36(W) x 27(H)mm



USB 3.0 Port Hub

If you've made the upgrade to USB 3.0, you'll need a hub to run all your new peripherals. This one has four ports and provides a 4.8Gbps data rate, 470,000 times faster than RS-232 and significantly faster than USB 2.0.

- USB 3.0 lead included
- Mains plugpack included
- Windows XP, Vista and 7

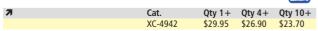
• Difficisions. 65(L) x 52(W) x 16	(П)!!!!!!		
7	Cat.	Qty 1+	Qty 4+
	XC-4947	\$69.95	\$62.95

FILE TRANSFER

High Speed USB File Transfer Cable

Sharing files between computers can be tedious unless they're networked together. Not any more - simply plug into a USB port on both PCs, a file-sharing window opens automatically on both machines showing the host and the remote computer. Drag and drop between them as easily as from one folder to another. No drivers, software or plug-ins to install.

- · No file size limitations
- Transfer rate of 16MB/second
- · Windows 2000, XP, Vista
- 1.8m long



CARD READERS

USB 2.0 Compact Multi-card Reader

The compact card reader that reads many popular memory card formats used in cameras and mobile phones. PC & Mac ready with USB 2.0 compliance designed for easy plug & play. It comes with a 500mm USB extension lead for difficult to access USB ports. Ideal for mobile photographers to back your work



MMC, MS & M2 Windows 2000/XP/Vista, Mac

• Dimensions: 68(L) x 33(W) x 13(H)mm





Cat. XC-4758 \$10.35 \$12.95 \$11.35

USB 3.0 SDXC Card Reader

The SDXC standard allows SD card storages of up to 2TB and transfer speeds up to 80Mbps. For dealing with capacities of this size, USB 3.0 is the only choice. It will greatly speed up the transferring of large files from a digital video camera, phone etc. It's also backward compatible with SDHC and all older versions of the SD Card format.

- Compatible with Windows XP, Vista, 7 (32/64-bit)
- Plug and play, hot swappable
 Dimensions: 65(L) x 65(W) x 14(H)mm

Supports the following SD cards:

Secure Digital (SD), Elite Pro SD, Extreme III SD, Gaming Edition SD, , Platinum II SD, SD Pro, SDHC, SDXC,SD-Max, SD-Pleomax, SD-Pro C, Super SD, Turbo SD, Ultima I SD, Ultima II SD, Ultimate SD, Ultra High Speed SD, Ultra II SD, Ultra II SD Plus, Ultra SD Ultra II که, סינויוומני که, סינו חוקוי אף אין טונים חוקוי אף אין טונדמ וו SD, Ultra II SD, Ultra SD, Ultra-X SD, OV-RS MMC, High Speed MMC I RS-MMC, MCCmobile, MMC Pro, MMCplus, MMCplus Turbo, RS-MMC, Micro SD

71	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4755	\$16.95	\$14.95	\$13.35

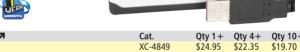
USB 2.0 All-In-One Card Reader

The card reader that reads everything. Supports: SD, Mini SD, SD Ultra II, SD Extreme III, MMC, MMC II, MMC 4.0, RS-MMC, HS RS-MMC, MMC Micro, M2, MS, MS Pro, MS Pro Duo, MS Extreme Pro, MS Extreme III Pro, MS Ultra II Pro, HS MS-MG Pro, HS MS-MG Pro Duo, MS ROM, MS Select, XD, XD(M), XD(H), CF I & II, CF Ultra II, CF Extreme III, CF Extreme, HS CF & Micro-drive.

DIGITECH

- Plug and playUSB 2.0
- Dimensions 60(L) x 40(W) x 13(H)mm





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USB 3.0 Memory Card Reader

This card reader accommodates all the mainstream memory cards including the new SDXC and CF600x standards.

- Includes 1 x USB 3.0 cable
- · LED indicator

- Hot swappable
 Supports the following memory cards
 Compatible with XP, Vista, 7 (32/64-bit)
 Dimensions: 86(L) x 58(W) x 21(D)mm

Qty 10+

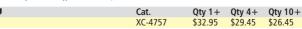
\$55.95

Compact Flash Type I/II, CF Elite Pro, CF PRO I, CF PRO II, CF Turbo, CF Ultima I, CF Ultima II, Extreme CF, Extreme III CF, HS CF, Ultra II CF

MS, MS DUO, MS PRO, MS PRO DUO, MS MagicGate, MS MagicGate PRO, MS MagicGate DUO, MS MagicGate PRO DUO, Extreme MS PRO, Extreme III MS PRO, Ultra II MS PRO, HS MS MagicGate PRO, HS MS MagicGate PRO DUO, MS ROM, MS Select

SecureDigital (SD), Elite Pro SD, Extreme III SD, Gaming Edition SD, Platinum II SD, SD Pro, SDHC, SDXC,SD-Max, SD-Pleomax, SD-Pro C, Super SD, Turbo SD, Ultima I SD, Ultima II SD, Ultimate, SD, Ultra High Speed SD, Ultra II SD, Ultra II SD Plus, Ultra SD, Ultra-X SD, DV-RS MMC, High Speed MMC/ RS-MMC, MCCmobile, MMC Pro, MMCplus, MMCplus Turbo, RS-MMC

Micro SD / M2 Slot: MicroSD (TransFlash), microSDHC / M2

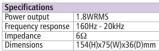




MULTIMEDIA SPEAKERS

USB Powered PC Speakers

Portable USB-powered speakers for use with laptops, desktop PCs or mobile music players. Contemporary, space saving design with plug and play functionality. Separate volume control, power switch and headphone output, and as they're powered via your computer's USB, there's no need to use a plug pack or batteries.



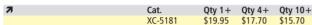


7	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-5191	\$14.95	\$13.35	\$11.70

Active Speakers

Sleek contemporary design with crystal clear sound quality to match. These speakers are a great way to project sound from your PC, iPod®, MP3 player or mobile phone. The standing design assists in creating a rich and vivid audio experience wherever you are. Easily accessible volume and treble controls and simple plug and play functionality make these speakers an ideal and affordable audio solution.

Specifications	
Power output	5WRMS
Driver size	3"
Dimensions	235(H) x 74(W) x 54(D)mm



USB Portable Speaker

It's lightweight and portable and connects to MP3 players, Smartphones, computers or any other audio source to listen to all your favourite tunes in great sound quality. Features

turbo bass technology with 2.1 subwoofer and illuminated blue LED volume control. Supplied with a rechargeable Lithium-ion battery, USB charger and 3.5mm stereo audio cable.

- Plug & Play
- Maximum power: 12WMAC and PC compatible
- Speaker dimensions: 210(L) x 60(W) x 50(H)mm

Spare Li-ion battery available separately Cat. XC-5195

7	Cat.	Qty 1+	Qty 3+	Qty 6+
Speaker	XC-5197	\$29.95	\$26.90	\$23.70
Spare Li-ion Battery	XC-5195	\$6.95	\$6.25	\$5.50

XC-5197

Mini MicroSD Card Speaker

It's a rechargeable active speaker with a solidly built aluminium casing. It can take a MicroSD card full of music files and it will play them in order or

you can pause, play or skip to another track. It can be used as a laptop or computer speaker or plugged into a range of other devices such as iPods®, iPads® or any device that has an earphone jack. It also has an internal battery for charging via USB.

Specifications	
Output	3+3WRMS
Frequency response	150Hz - 18kHz
S/N ratio	80dB
Dimensions	74(L) x 50(W) x 52(H)mm

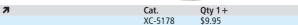
7	Cat.	Qty 1+	Qty 3+	Qty 6+
Speaker	XC-5176	\$39.95	\$35.90	\$31.90

Mini Rechargeable USB Keychain Speaker

Want to throw a little party? You'll need a little music and this is the speaker to do it. Whenever you want to share your sound, your keychain speaker will distribute the decibels. Compatible with any device that features a 3.5 mm headphone socket such as iPods®, MP3 players, PDAs, portable games and computers. It comes with a USB connection included to recharge the built-in battery. The ultimate in portability.

USB and 3.5 - 3.5mm cable included

• Dimensions: 25(W) x 25(H) x 25(D)mm



Freecall order hotline: 1800 022 888

HEADSETS

Computer Headphones with Flexible Microphone Boom

Comfortable and lightweight at only 48 grams for hours of gaming or podcasting. The lead is terminated in separate mic and speaker jacks for computer use and is a generous 2m.



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2033	\$14.95	\$13.35	\$11.70

Comfortable Computer Headphone/Mic

This slightly retro-looking product features a stainless steel headband and extremely soft ear pads. They have a fabric headband beneath the stainless headband, which evenly distribute the weight of the headset on your head, resulting in a very comfortable to wear headset. The microphone is an electret condenser type on a sturdy but flexible metal gooseneck.

- Cable: 2.5m long with two 3.5 stereo plugs for headphones and mic connection
- In-line volume control

Specifications	
Transducers	40mm dia
Impedance	32ohms (standard)
Freq. response	20-20,800Hz
Sensitivity	110dB
Impedance	1.4k Ohm

Microphone:	
Sensitivity	-48 +3dB
Freq. response	30-16000 Hz
Operating voltage	3VDC
Response pattern	Omni-directional

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2078	\$19.95	\$17.70	\$15.70

Gaming Backphones with Built in Bass Shakers and Microphone

These awesome backphones have a built in bass shaker that adds depth and realism to your gaming experience. The bass shaker massively enhances low frequency response and it feels like you are listening to the music through high-powered Hi-Fi speakers. But only you can hear it! The backphones are lightweight with soft padded earpieces and can be worn for hours. They include a concealed microphone making them perfect for network games that include comms and are also useful in VoIP applications such as Skype[®]. An in-line volume control is included and the bass shaker system can be switched off when required. The incorporated 1.7m cable is fitted and terminated with two gold plated 3.5mm plugs for speaker and microphone connections



Rechargeable Bluetooth® **Headset with Mic**

Lightweight Bluetooth® mono headset that can be connected with two Bluetooth® devices at the same time. Talk hands-free while driving, or connect to your Bluetooth enabled PC or PS3. Features anti-noise technology for crystal clear conversation multifunction button for voice command, last number redial, call rejection, and adjustable volume. The built-in Li-Po battery charges from a USB port (USB cable included). Compatible with Bluetooth® mobiles and Smartphones

- Bluetooth® V2.1 with 10m range Supports 2 multipoint connections
- 3 hour charge time/13 hour usage 220 hour standby time

· Weight: 42g

CRHZ!







7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2080	\$39.95	\$35.90	\$31.90

Monitor Brackets & Computer Accessories

MICROPHONES

Computer Microphone

This omni - directional condenser microphone supplied with a small bracket which will mount on your monitor and it incorporates a lapel clip for wearing.

Specifications Frequency 50 - 13kHz -60dB ±3dB at 1kHz Sensitivity Cable length 1.9 metres Mic plug 3.5mm stereo plug Impedance



Qty 1+ AM-4081 \$5.95

NOTEBOOK LIGHTS Ultra-light USB Charged

Book Reading Light

This stylish book light recharges via your USB port. Flexible positioning, 180° rotatable. Weighs only 35g. Black only. It's supplied with two brackets, one for clipping onto your notebook monitor, the other for attaching to a book.

Measures: 110(H) x 35(W) x 15(D)mm (less clip)



Desktop Multim	nedia Microphone	е
	ion software or simply rec	
and sound. This microp	hone can sit on your desl	Œ

ording voice top or can be attached to your computer monitor. It produces low noise and has a wide frequency response.

Specifications	
Directionality	Omni directional
Sensitivity	-62dB -/+ 3dB
Impedance	Low
Frequency	20Hz-16kHz
Cable length	3m
Operating voltage	1V-10V
Mic plug	3.5mm

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AM-4087	\$12.95	\$11.35	\$10.35

Cat. Qty 3+ Qty 6+ Qty 1+ \$6.95 \$6.25 **USB Powered Notebook Light** Use this USB port powered light when looking inside a computer, or when on the road with a laptop. Twist the head as it has a

gooseneck for universal angle adjustment. This unit is powered by the USB port therefore the Laptop or PC will need to be turned on for

> Cat. ST-2808 \$9.95



Oty 3+

\$7.75

\$8.75

MONITOR BRACKETS

LCD Computer Screen Desk Brackets

Desk space, the final frontier. If your desk is clogged with notes, manila folders and finding space is becoming a dangerous balancing act, then you need an LCD bracket. These brackets use a C-type clamp for a powerful lock onto a variety of desk thicknesses. The monitor can swivel horizontally, tilt vertically, and extends to approximately 400mm from the base. For an extra bit of customisation, the monitor can be rotated from portrait to landscape,

SINGLE SCREEN LCD BRACKET

- VESA mounting (75mm x 75mm and 100mm x 100mm)
- Fully adjustable arms
- Rotate monitor from landscape to portrait

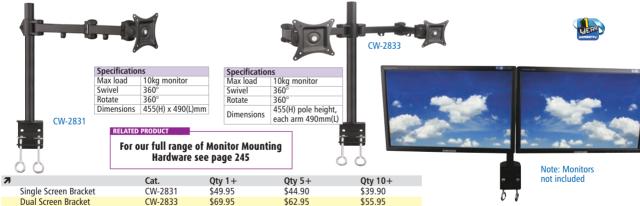
which is especially useful for the double screen model. To bolster desk neatness, easy to open cable clips run along the structure of the bracket to house your DVI cable, monitor power cable or any other cable that requires monitor connection. Both brackets feature a sleek matte black finish for an inconspicuous blending into your desk motif.

Suitable for monitors up to 27"

DOUBLE SCREEN LCD BRACKET

- VESA mounting (75mm x 75mm and 100mm x 100mm)
- Fully adjustable arms
- Rotates from landscape to portrait

Note: Monitor not included



Screen Cleaner Kit for Small Devices

This handy screen cleaner is suitable for all small screens including Phone®, mobile phones and cameras. The unique cleaning solution removes fingerprints, dust and stains without scratching the screen. Supplied with a washable microfibre finger cloth and a 12ml cleaning solution bottle. Small and compact design

- · Drip-free cleaning solution
- Includes 12ml cleaning solution bottle
- Dimensions: 90(H) x 45(W) x 22(D)mm

iPhone® not included



\$6.25

AR-1415

Screen Cleaning Kit

Removes dust and fingerprints from LCD screens effectively without streaks, scratches or stains. The three sided cleaner has a soft microfibre cloth to prevent scratches, and the cleaning solution has a unique formula for an effective clean. The screen cleaner and cleaning solution pack away for easy

- Includes 25ml cleaning solution bottle
 Dimensions: 150(L) x 45(H) x 30(D)mm



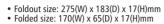
Screen not included

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AR-1417	\$9.95	\$8.75	\$7.75

LAPTOP COOLING - USB POWERED

Foldout Twin-Fan Notebook Cooling Pad

Designed for portability and durability this foldout twin-fan cooling pad will help keep your notebook from overheating and is made from strong steel construction that folds neatly into a compact package. Once folded out it's suitable for any size laptop and is conveniently powered via USB connection no need for an extra power supply.









7	Cat.	Qty 1+	Qty 3+	Qty 6+
	XC-5216	\$9.95	\$8.75	\$7.75

Notebook USB Cooling Pad - Very Quiet.

An ideal solution if you have a notebook that suffers from overheating or poor air circulation. This notebook cooling pad simply plugs into your notebook's USB port and has an inbuilt 18cm cooling fan to dissipate heat. Having one large fan results in it being quieter than other pads with multiple small fans. Featuring four non-slip

pads and an ergonomically tilted surface, you'll be typing comfortably in front of your fan-cooled notebook for hours. Its sleek curves and transparent design makes it a functional and attractive centrepiece for any home or office workspace.





7	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-5210	\$14.95	\$13.35	\$11.70

Portable Study Table with Notebook Cooler

Lots of applications for this handy fold-up table. Read or study in bed, at the park or anywhere else. Two work surfaces - the adjustable sloping rest can be used for a laptop or a book and the flat surface as a mouse pad or writing surface. The legs are height-adjustable and it also has a pen holder, cup holder and cooling fans for your laptop. The whole lot folds up neatly for easy transport and storage.

- Built-in laptop cooling fans Height adjustable
 Retractable USB cable included
- Size folded: 285(W) x 316(H) x 36(D)mm Size unfolded: 570(W) x 316(H) x 36(D)mm





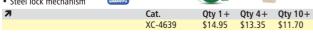
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-5218	\$29.95	\$26.90	\$23.70

PC SECURITY

Combination Notebook Cable Lock

As easy as typing in four digits to unlock your phone, this laptop security cable has a four digit combination that you can customise for security. It's 1.8m long and has a swivel on the end so moving it around your desk area will not be a problem

- 1.8m long
- 4 digit combination
- Steel lock mechanism



GRAPHICS TABLET

5.5" Graphics Tablet

What does a graphics tablet do? It's an input device like a keyboard or mouse, but there are many reasons why you'd use one instead of a mouse. Using a pen or pencil is completely natural, more comfortable and far more accurate. More importantly, a tablet has far higher resolution than a mouse, and it's pressure sensitive, so if you're working with brush tools in Photoshop, for example, the pen on the tablet behaves exactly as a brush or pen would. You can assign the pen tip and other buttons to any function or keystroke you like and the tablet has user-defined "hotspots" around the border that can be used to open applications or used like mini-macros with defined sets of keystrokes. Paint, draw, write,

touch up or use it as a pointing device. The included software has a trial version of Photoshop CS4 and Corel Painter X. Absolutely essential tool for graphics designers, photographers or other creatives

- Battery and software included
 Windows 2000, XP, Vista or Mac
- Dimensions: 205(W) x 190(H)mm
- Note: Requires Storage Media: Up to 32GB SD card



\$14.95

\$13.35

Cat.

Qty 1+ \$39.95 XC-0356

PRESENTATION AIDS

Keyring Laser Pointer

This laser keyring pointer is chrome plated, and has a keychain attached. Requires 3 x LR44 batteries, which are supplied.

- Very small, only 73mm long x 14.5mm dia
- Wavelength 670nm / Max output < 1mW
- · Do not stare into beam

This laser pointer has passed Australian Standards for laser pointers. AS/NZS 2211.1:1997.

Qty 5+ ST-3102

RF Presenter with Laser Pointer

Combining a laser pointer and an RF remote control, this handy device gives you control over your PowerPoint presentations, training sessions or slide shows. The receiver connects to any USB port and gives you page up/down, play and blank screen functions. Ideal for corporate trainers, conferences or just for the family holiday slide show.

- Battery included
 Up to 10 metre range
 Dimensions: 88(L) x 34(W) x 9(H)mm

This laser pointer has passed Australian Standards for laser pointers. AS/N7S 2211 1:1997

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7	Cat.	Qty 1+	Qty 4+	Qty 10+
	ST-3111	\$39.95	\$35.90	\$31.90

eFlash Portable Presentation Console

eFlash allows you to present common Microsoft Office applications without the need for a computer. It connects easily and intuitively to a projector or TV with simple cable connections and is operated by the included remote control with integrated laser pointer. Store your

presentations on a memory card and leave the computer at the office. An essential for corporate trainers and teachers.

- Thumbnail index page with file namesAuto slide show with variable rate
- Accepts SD and MMC cards

- Displays at true colour VGA resolution (up to 640 x 480).
 Zoom and pan feature for clarity when viewing spreadsheets or fine print
 Supported formats: Microsoft Word, Excel, PowerPoint, PDF, Macromedia Flash, JPEG
 TV output PAL and NTSC compatible
- Dimensions: 103(L) x 115(W) x 53(H)mm



7	Cat.	Qty 1+
	XC-5405	\$54.95

USB POWER STATION

USB Desktop Station

Free yourself from clutter and avoid the stress of losing things. This neat & stylish USB desktop station charges multiple items at once such as your mobile phone, iPod®, PDA and other USB devices. It keeps your workspace free from messy USB leads as well as providing a handy refuge for your wallet, keys, watch, pen, sunglasses etc. Featuring a removable tray which uncovers a

hidden compartment, it comes with 8 connectors compatible with major brand mobile phones. So next time you're in a manic rush to leave, simply grab all your personal items from your USB desktop station before you head out the door - with everything charged and nothing more to search for.

- 2m USB DC-DC power cord supplied
 4 outlets: 2 x USB outputs and 2 x docking cable outputs
- 8 x adaptors compatible with most Nokia, Sony Ericsson, Motorola, Samsung and LG mobile phones
 Dimensions: 230(L) x 230(W) x 40(H)mm



7	Cat.	Qty 1+	Qty 5+	Qty 10+
	MR-3640	\$19.95	\$17.70	\$15.70

SPECIALTY SCANNERS

USB Business Card Scanner

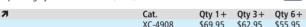
Save your business card contacts directly to an Outlook or Outlook Express address book

It is powered by USB and uses a 1.3MP sensor with a backlight which scans and saves clear images. The included Optical Character Recognition software extracts text from the business card then categorises the information in to 13 different fields (i.e. Name, Company, Department, Address, etc.). Compact portable. Unit supplied with a mini USB lead.



- · Scans single or double sided business cards
- Export to address book, Outlook or Outlook Express
- Export to Excel to organize mail merges, search and sort contacts Identifies text fields for Company name, Address, Phone number and more
- Supports multiple languages: English, Spanish, Chinese, Japanese and more Dimensions: 120(L) x 70(W) x 20(D) mm
- Sensor: 1.3 Mega Pixels
- Interface: USB 2.0 Still Image: BMP/JPG
- Illumination requirements: 150 to 2 Lux

*Operating System: Windows XP/Vista/7



Cat.

QC-3130

USB Business Card Scanner

Scan and organise business card contacts simply to your computer. It is powered by USB and uses a 2MP sensor with fixed focus to capture clear images. The included Optical Character Recognition software extracts text from the business card then categorises the information into different fields, which can be linked to your mail client (eg. Outlook). Compact and portable, and doubles as a webcam with microphone. Supplied with a mini USB lead.



- Export to mail clients like OutlookIdentifies text fields for Company name, Address, Phone number and more
- Supports multiple languages
- Sensor: 2MP Interface: USB 2.0
- Still Image: BMP/JPG
- Illumination requirements: 150 to 2 Lux
- Operating System: Windows, Linux & MAC
- Dimensions (folded): 95(L) x 37(W) x 14(D)mm



Qty3+

\$44.90



Almost a photocopier in your hand. Portable handy scanner can capture A4-size documents, book, letters, photos, and more directly to a micro SD card or save image files to computer via USB cable. Move the scanner over the area to be scanned and the colour image sensor scans at low (300 x 300DPI) or high (600 x 600DPI) resolution. Unique stand alone operation that requires no computer or software to operate. The LCD displays scanning status, resolution, battery life and memory status

- Scan width: 8.27"/21cm (A4)
- Maximum scan: 300DPI 125cm, 600DPI 62cm
- Built-in LCD: status display, resolution, battery lifespan and memory status
 Auto power off after 3 minutes

- Add colour contact image sensor 5136 dots

 Maximum scanning speed for A4 document:

 Colour high resolution: 13 seconds / Colour low resolution: 3 seconds Mono high resolution: 6 seconds / Mono low resolution: 2 seconds Supports MicroSD cards up to 32GB
- Store up to 1280 x 300DPI images
- USB interface
- Requires 2 x AA alkaline batteries
- Dimensions: 256(L) x 30(W) x 31(H)mm

Qty 10+ XC-4909 \$99.00 \$88.95 \$78.95

CONVERT SLIDES, FILM & PHOTOS TO DIGITAL

USB Slide/Film Scanner

Even the most reliable archive methods can't prevent your photos, slides and negatives from fading and becoming damaged. Convert them to digital images quickly and easily with this USB scanner. Images are scanned in about half a second for high-speed conversion and editing using the included Arcsoft Photoimpression software or one of many other image management programs. The scanner connects to any computer with a USB 2.0 port. Your precious memories will be preserved forever

- High-speed, one button scanningColour or B&W film or slides
- USB powered
- Negative and slide holders included
- 1,800 dpi resolution

System requirements:

- Windows XP, Vista USB 2.0 port
- 512MB RAM
- Dimensions: 85(W) x 165(H) x 90(D)mm





Note: Laptop not included

Handles up to A4

size paper

Cat.	Qty 1+
XC-4881	\$45.00

USB Photo Scanner

Preserve your cherished old photos by converting them to digital format with this easy-to-use USB photo scanner. Simply download the included software, connect the photo scanner to your computer via USB and you're ready to start scanning. With an 8 megapixel sensor and crisp white LED lighting, it will produce clear high resolution scans quickly and easily. It also takes great close object photos and can be used as a webcam! Bring the best out of your images with the ArcSoft Medialmpression software, which converts your scans to JPEG or TIF format, and enables you to do basic photo editing such as crop, straighten, retouch & colour adjust.

- Four photo sizes: 3 .5x3.5, 3.5x4.5, 3.5x5.0, 4.0x6.0 inches
 Image sensor: 1/4-inch CMOS sensor (8-megapixel interpolation)
- High resolution up to 3600 x 2400 (600dpi)
 PC & MAC compatible
- Dimensions: 19(L) x 18(H) x 23(W)mm
- System Requirements:

Processor: PC Pentium 4 or MAC PowerPC G4
 OS: PC Win XP Service Pack II or

- MAC 10.4.3 or later 512MB RAM, 500MB free hard disk space
- CD ROM drive USB 2.0





CRAZU

Cat. Otv 1-\$69.00 XC-4910



SCANNERS - IMAGE

USB Combo Image Scanner with LCD

Digital cameras and digital file storage have been around for many years now and have ensured all your digital pics can be edited, stored and shared for all time. However what will happen to your cherished old photos and slides? Convert them to digital format with this versatile and easy-to-use combo scanner. With USB connection, you can connect this to your PC and take high resolution scans of all your photos, slides and

negatives to preserve in JPEG or TIF format before they fade away. Also features a memory card slot and LCD panel so you have the option to preview & transfer all your scans directly to memory card without the need for PC

- Crisp 2.4" LCD preview panel
 Dual modes film/slide scanner and photo scanner
 Negative holder and slide holder
 3 x photo holders 3" x 5", 4 x 6" and 5 x 7"
 SD, XD, MMC, MS, MS-Pro memory card slot
- 1/2.5" inch 5MP CMOS sensor 3,600 dpi (5,184x3,600) or 1,800dpi (2,592 x 1,800)
- Fixed focus, auto exposure & auto colour balance
- Power via USB connection
 Windows XP & Vista compatible (32 or 64 bit)
- Dimensions: 210(L) x 230(W) x 150(H)mm



1	Cat.	Qty 1+
	XC-4893	\$129.0

CONVERT VIDEO TAPE TO DIGITAL

Economy DVD Maker

An easy to connect USB to video adaptor which allows you to capture high quality video and audio through a USB 2.0 interface to burn your own high definition DVD/VCDs. It's capable of real time recording MPEG 4/2/1 video formats. The compact size makes it ideal to take along anywhere. Operating couldn,t be easier; with the one touch grabber; simply push the button to start and push again to stop

- System requirements
 Pentium-IV 1.6GHz
- or higher (recommended) 256MB RAM
- Graphics card (must support DirectX 9.0c)
- Sound card
- 1GB free HD space
- · Microsoft Windows XP / Windows Vista

Specifications	
Interface	USB 2.0
Video Input	Composite (RCA), S-Video
Audio Input	RCA Audio in
Capture video sources	VHS, V8, Hi-8, etc
Video and video formats	DVD, SVCD, VCD, MPEG-4, AVI, WMV, WMA, MP3
Image formats	JPEG, BMP
Dimensions	52(L) x 50(W) x 27(H)mm



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4991	\$39.95	\$35.90	\$31.90

USB 2.0 DVD Maker

Turn your aging collection of VHS and Betamax video tapes into new video productions or record live video straight to your DVD or CD burner. This powerful video recording and editing system will help you make your own DVD movies or family documentaries and uses the latest MPEG-4 compression to produce high-quality real-time recordings from practically any AV source. The powerful editing software lets you add colour and transition effects as well as sound tracks and titles to your work. Send copies of your completed movies on DVD or VDC to your friends and family and keep them up-to-date with the goings-on at home. The USB interface makes connection a snap so you can be making movies and editing them in no time. Powered by the USB connection.

- Supports USB 1.1 & 2.0 Plug-and-Play
- Resolution up to 720 x 576 @25 fps (PAL) or 720 x 480 @30fps (NTSC)
 Composite Video input via RCA connector or S-Video mini-DIN
- Stereo audio input via RCA connectors Audio output via 3.5mm
- stereo plug Capture box: 35(W) x 95(D) x 15(H)mm

Minimum System Requirements: P4 1.6GHz, 256MB RAM

- Windows XP, 2000 & Windows 7
 DVD or CD burner
- Compatible Card
- Qty 4+ Qty 10+ XC-4867

DIGITAL VOICE RECORDERS

512MB Digital Voice Recorder



Record up to 270 hours of voice, notes or music. Three recording options are available high quality, long play or short play with either manual or voice-activated recording.

You can either play back through headphones or use the included software to play, save or edit the audio files on your PC. An LCD screen keeps track of everything you record and it can also be used as an MP3 player.

- USB cable, earphone and external MIC included
- · External mic input
- Requires 2 x AAA battery





1	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-0381	\$49.95	\$44.90	\$39.90

4GB Digital Voice Recorder

With expanded capacity of 4GB and stereo capability, this recorder is ideal for the roving muso to quickly record musical ideas in either SHQ, HQ, LP and SP and to play back MP3 tracks. Play back through headphones or the built-in speaker. Also great for students and business meetings

- Up to 1080 hours recording

- Supports MP3/WMA/ACT formats
 Built in lithium ion battery
 USB cable, user manual, earphone, external MIC
- Dimensions: 85(L) x 34(W) x 11(H)mm







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7	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-0383	\$99.00	\$88.95	\$78.95

High Audio Resolution Digital Stereo Recorder

A brilliant little recorder that lets you record your musical ideas quickly and easily or capture your next jam session. Simple one button recording - press once for standby then again to record, or use the VOX function. Records via the stereo pair of microphones straight to an SD card then you can also edit the recordings in the unit itself. Also suitable for recording conferences, meetings and lectures. Switchable stereo or mono with variable resolution and sample rate settings. Pocket size to take anywhere and can be powered by batteries or a 5VDC plugpack

- Line in and mic inputs
- Headphone and built in speakers High quality digital recording

MP3, WAV

2 x AA batteries

- VOX function
- ALC recording Switchable stereo or mono
- Tripod mount

Specifications

Sample rates

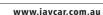
Requires







7	Cat.	Qty 1+	Qty 2+	Qty 4+
	XC-0386	\$179.00	\$160.95	\$142.95



Freecall order hotline: 1800 022 888

Laptop Power Supplies

MAINS LAPTOP POWER SUPPLIES

Buying an extra power supply saves the hassle of taking the power supply everywhere you take your laptop. Keep one at the office and one at home. The original power supply on your laptop may have failed, so get a replacement at a fraction of the cost of a genuine part. There's a model compatible with most laptops or netbooks on the market. See our website for compatibility charts.

- Manual Type: switch the output voltage to be compatible with your laptop
- Automatic Type: models switch voltage automatically depending on the connector used. Some models display the voltage on a LED or LCD display.
- All models feature short circuit and overload protection.





40W Netbook - A	Automatic Cat MP-347	7	State of
Specifications		-	
Input voltage	110 - 240VAC		
Power output	40W		
Output voltages	12 - 24VDC		
Output voltage selection	Automatic		
Output current	3A		
Plugs	7		A (A)
Dimensions	172(L) x 69(W) x 40(H)mm		
			C.

70W Universal - Automatic Cat MP-3320

Adtolliatio cativii 3320
100 - 240VAC
70W
8.4 - 24VDC
Automatic
4A
16
110(L) x 52(W) x 25(H)mm

90W Universal -	Manual Cat MP-3476	· 1
Specifications		
Input voltage	110 - 240VAC	
Power output	90W	
Output voltages	12 - 22VDC	
Output voltage selection	Manual	
Output current	6A	
Plugs	9	00
D' '	450(1) 50(11) 27(11)	

150(L) x 58(W) x 37(H)mn

90W Universal - Automatic Cat MP-3475

Specifications	440 240146	3.3
Input voltage	110 - 240VAC	
Power output	90W	CAPTOR AL
Output voltages	15 - 24VDC	
Output voltage selection	Automatic	Annual Control of the
Output current	2 - 6A	
Plugs	16	
Dimensions	154(L) x 58(W) x 37(H)mm	-

90W Universal - Automatic Cat MP-3326

Features USB output for	charging USB devices.	
Specifications		
Input voltage	100-240VAC	
Power output	90W	
Output voltages	15/16VDC @ 4.74A	- 4
	19VDC @ 4.2A	4
	5VDC @ 2.1A (USB Power)	All
Output voltage selection	Automatic	
Plugs	11	0
Dimensions	126(L) x 55(W) x 31(H)mm	

90W Universal - Slimline - 19VDC Cat MP-3327

Input voltage 100-240VAC Power output 90W Output voltage 19VDC 4.73A (suitable for laptops requiring 18-20V) Plugs 8	Specifications		TOIR
Output voltage 19VDC 4.73A (suitable for laptops requiring 18-20V) Plugs 8	Input voltage	100-240VAC	
Output voltage laptops requiring 18-20V) Plugs 8	Power output	90W	
Plugs 8	Outnut valtage	19VDC 4.73A (suitable for	
	Output voltage	laptops requiring 18-20V)	
Dimensions 94(L) x 67(W) x 17(H)mm	Plugs	8	
	Dimensions	94(L) x 67(W) x 17(H)mm	



		a dia
Specifications		165
Input voltage	100 - 240VAC	
Power output	120W	
Voltage selection	Automatic	
Output voltages	5 - 24VDC	
Output current	8A	CYCLE OF STREET
Plugs	13	4444666
Dimensions	141(L) x 63(W) x 32(H)mm	

144W Universal - Manual Cat MP-3471

Features USB output for charging USB devices.

•	3 3
Specifications	
Input voltage	100 - 240VAC
Power output	144W
Output voltages/current	12/14/15/16V @ 8.5A 18V @ 7.7A 18.5/19V @ 7.25A 19.5/20V @ 7A 22V @ 6.5A 24V @ 6A
Output voltage selection	USB 5V 1A Manual
Plugs	9
Dimensions	180(L) x 63(W) x 40(H)mm



|--|

Specifications	
Input voltage	110 - 240VAC
Power output	150W
Output voltages	12 - 20V, 22-24V
Output voltage selection	Automatic
Output current	12 - 20V @ 7.5A
Output current	22-24V @ 6.25A
Plugs	16
Dimensions	158(L) x 63(W) x 37(H)mm

Suits most models. See website for compatibility.

7	Wattage	Туре	Cat.	Qty 1+	Qty 4+	Qty 10+
	40W	Auto	MP-3477	\$49.95	\$44.90	\$39.90
	70W	Auto	MP-3320	\$59.95	\$53.95	\$47.90
	90W	Manual	MP-3476	\$69.95	\$62.95	\$55.95
	90W	Auto	MP-3475	\$59.95	\$53.95	\$47.90
	90W	Auto	MP-3326	\$79.95	\$71.95	\$63.95
	90W	Auto - Slim	MP-3327	\$79.95	\$71.95	\$63.95
	120W	Auto	MP-3328	\$129.00	\$115.95	\$102.95
	144W	Manual	MP-3471	\$119.00	\$106.95	\$94.95
	150W	Auto	MP-3473	\$89.00	\$79.95	\$70.95

POWER SUPPLIES FOR MACBOOK®

Power Supplies for MacBook®

Cost effective replacement power supplies for your MacBook® that don't sacrifice quality and reliability. Both use a magnetic connector compatible with the MacBook®, which also has LED indications to show the charge status of the battery. Cable clips foldout to coil the lead around for compact storage and transport.

Specifications	
Input voltage	100 - 240VAC
Power output	60W or 85W
Output voltages	16.5 or 18.5V
Dimensions	126(L) x 55(W) x 31(H)mm
Plug	Magnetic Connector

g	Magnetic Connector				WR
Wattage	Voltage	Cat.	Qty 1+	Qty 4+	Qty
60W	16.5V	MP-3330	\$49.95	\$44.90	\$39
85W	18.5V	MP-3331	\$49.95	\$44.90	\$39





Uninterruptible Power Supplies

IN-CAR LAPTOP POWER SUPPLIES

Keep your laptop or netbook charged on the road. Models to suit most of the mini computers on the market. Check our website for compatibility.



Features USB output for	charging USB devices.			
Specifications			THE REAL PROPERTY.	
Input voltage	12VDC			_
Power output	50W			
Output voltages	12-24VDC, 5VDC 1A USB		100	0
Output voltage selection	Automatic			•
Output current	3A	Car		
Plugs	7			
Dimensions	93(L) x 30(W) x 30(H)mm	-		

7	Wattage	Туре	Cat.	Qty 1+	Qty 4+	Qty 10+
	50W	Auto	MP-3479	\$34.95	\$31.45	\$27.90
	90W	Auto	MP-3324	\$59.95	\$53.95	\$47.90
	150W	Manual	MP-3472	\$74.95	\$67.50	\$59.95

90W - Automatic Cat. MP-3324

Specifications	
Input voltage	12VDC
Power output	90W
Output voltages	15 - 24VDC
Output voltage selection	Automatic
Output current	3.75A
Plugs	16
Dimensions	95(L) x 62(W) x 35(H)mm



Specifications	
Input voltage	12VDC
Power output	150W
Output voltages	15, 16, 18, 19, 20, 22, 24VDC
Output voltage selection	Manual
Output current	6A
Plugs	9
Dimensions	115(L) x 60(W) x 35(H)mm



UNINTERRUPTIBLE POWER SUPPLIES (UPS)

Guard against the unpredictability of mains power. Lightning storms, power surges, voltage or spikes, or faulty wiring are just a handful of problems that may cause damage to your computer and connected peripherals. An uninterruptible power supply (UPS) will seamlessly maintain power to your system with a battery and inverter in the event of a power failure. Once the UPS is installed, it will constantly monitor the mains supply and switch to battery power enabling the computer to be shut down without data loss.

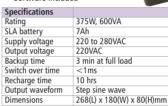
Three ranges to choose from

- 1) OFFLINE (STANDBY) UNITS which supply battery power to equipment when the mains power supply falls below a predetermined limit or
- 2) LINE INTERACTIVE UNITS which offer back up protections, similar to Offline units, but also provide voltage regulation in case of a brownout or surge in supply voltage.
- 3) ON-LINE UNITS offer the highest level of protection and most stable power output.

Line Interactive UPS - 600VA 375W

Compact and completely self-contained this is the ideal backup solution for your data or other important equipment. It has 3 surgeprotected outlets as well as 3 outlets backed up by the UPS. It also has RJ11 ports for protecting phone or fax lines.

 Cold start feature Software included







Otv 4+ \$109.00 \$97.95

Line Interactive UPS Systems - 650VA & 1500VA

Protect your valuable computer system and critical data from black-outs, brown-outs and power surges. Brownouts and power failures can play havoc with sensitive computer systems and cause significant data corruption. In a worst-case scenario, you could lose irreplaceable data in a blink-of-the-lights. Even if you perform regular backups, you would not be able to recover files that were open when the system goes down. Once the uninterruptible power supply (UPS) is installed, it will constantly monitor the mains supply and switch to battery power and enable the system to be shut down without data loss. The included software can even be set up to save your data and close down

your computer automatically if the power fails while you are away from your desk. The UPS is supplied with a 7Ah SLA battery, USB interface cable and software.

Specifications	MP-5201	MP-5203
Rating	390W, 650VA	900W, 1500VA
SLA battery	7Ah 12V	2 x 12V 9Ah
Supply voltage	220 to 280VAC	220 to 280VAC
Output voltage	220VAC	220VAC
Backup time	3 min at full load	3 min at full load
Switch over time	<1ms	<1ms
Recharge time	8 hrs	8 hrs
Output waveform	Step sine wave	Step sine wave
Dimensions	325(L) x 100(W) x 160(H)mm	375(L) x 125(W) x 225(H)mm







Line Interactive UPS - 650VA & 1500VA - with LCD

Critical systems should ideally be connected to some form of backup power in the event of a blackout, power surge or brownout. A fault at the grid may drop the voltage at the mains, which could cause some systems to shutdown, reset, and lose data or worse, resulting in thousands of dollars of damage (both material and immaterial).

These line interactive units give you a good balance between real time system protection and power redundancy when mains electricity is down or experiencing reliability issues. During mains voltage sags both units will deliver a steady voltage, keeping critical systems running properly. For a total power blackout the units can keep your systems running long enough to save important data or cleanly shutdown connected devices. Other important features include an auto shutdown when no load is detected, audible alarms for low battery, self diagnosis on boot, and intelligent battery management.

Both models feature an easy to read LCD which displays battery and load values as a percentage and input/output voltages. At the rear of the unit are 2 x RJ11 sockets for Telephone/Fax protection and a USB socket for connection to your PC for use with the power management software.

Specifications	MP-5205	MP-5207
Usage	Home PC, SOHO	Home PC, SOHO
Type	Line interactive	Line interactive
Status Display	LCD	LCD
Backup time full load Mins	10 - 20 minutes	10 - 20 minutes
Recharge time	90% Capacity after 8 Hours	90% Capacity after 8 Hrs
Internal SLA battery	1 x 12V 7Ah	2 x 12V/8Ah
Input voltage	180 - 230VAC	180 - 230VAC
Short circuit protection	Yes	-
Mains connections	2 (input and output)	2 (input and output)
Communication	USB	USB
Frequency	50Hz	50Hz
Dimensions	340(L) x 95(W) x 165(H)mm	400(L) x 125(W) x 220(H)

7		Cat.	Qty 1+	Qty 4+	Qty 10+
	390VA - 650W	MP-5205	\$179.00	\$160.95	\$142.95
	900VA - 1500W	MP-5207	\$349.00	\$315.00	\$279.00

Freecall order hotline: 1800 022 888





Rack Mount - UPS, Patch Panels & Switch

MP-5210

LCD 3.00

7 00

1000VA

RS-232

50Hz

2 x 12V 7Ah

150 - 280VAC

2 mains sockets

400 (L) x 210 (H) x 145 (W) mm

Industrial backup power

Online double conversion

UNINTERRUPTIBLE POWER SUPPLIES UPS (CONTINUED)

On-Line - 1000VA 700W

This Industrial quality true online UPS is designed for critical loads. The output is run from the internal battery through the sine wave inverter. The mains input is only used to charge the batteries and is never directly passed through. This allows the UPS to provide a perfectly clean sine wave output no matter what the mains throws at it. You're covered for surges, spikes, noise, brownouts and blackouts for as long as the batteries last. A backlit LCD shows you the operating status and advises you of any fault condition. It also provides an RS-232 interface so the UPS can be connected to a computer and used with the included management software

- Backup time of 7 minutes at 50% load
- Pure sine wave output
- True on-line operation
- 2 x 240V outlets Software included





Specifications

Status display
Backup time full load (mins)

Backup time half load (mins)

Battery back up capacity Internal SLA battery

Input voltage Mains connections

Communication

Frequency

Dimensions

Usage

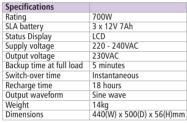




7		Cat.	Qty 1+
	1000VA - 700W	MP-5210	\$399.00

On-Line Rack Mount 1000VA, 700W

Sometimes called a true UPS. It has two power sources and a transfer switch that selects between them, but the primary power source is the battery and utility power is the secondary power source. Under normal operation the UPS is always running from the battery and the inverter, while the line power runs the battery charger. This design means that there is no transfer time in the event of a power failure - if the power goes out, the inverter (and its load) keeps chugging along and only the battery charger fails. This UPS can be either incorporated into a standard 19" rack set up or used in a tower configuration; brackets are included for tower application. For rack mount application buy HB-5456 on page 308. The LCD tells you charging and system status and can be rotated 90° to suit the orientation that the UPS is installed.





Qty 10+

\$479.00



[RAZU

JWILCH OVER LITTLE	mstantancous
Recharge time	18 hours
Output waveform	Sine wave
Weight	14kg
Dimensions	440(W) x 500(D) x
_	_

MP-5212

\$599.00

Qty 4+ \$539.00 Product may vary from image

RACK MOUNT PATCH PANELS / SWITCH

Rack Mount Cat5e/6 Patch Panels



Sleek attractive looking rack mount 24 port patch panel with a hard metal exterior. Numbered ports and a labelling area for each port. Also comes with instruction stickers on the back for easier cabling. See our tool section for punch-down tools

• Takes up 1 rack unit (1U)

1000VA - 800W

- 24 port
- Numbered ports
- Labelling area Cat5/Cat6
- Dimensions: 485(W) x 44(H) x 34(D) mm



7		Cat.	Qty 1+	Qty 4+	Qty 10+
	24 Port Patch Panel Cat5e	YN-8046	\$49.95	\$44.90	\$39.90
	24 Port Patch Panel Cat6	VN_8048	\$60.05	\$62.05	¢55.05

Rack Mount 16 Port 10/100Mbps Fast Ethernet Switch



10/100Mbps 16 Port rack mount switch with simple and easy-to-read interface. 16 LEDs for each port's status. Suitable for home LANs, multimedia classrooms, Internet cafes and enterprise networks

- 10/100Mbps
- IEC power connection
- Dimensions: 440(L) x 123(W) x 44(H)mm

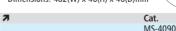
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8085	\$69.95	\$62.95	\$55.95

Rack-Mount 6 IEC Power Distribution Unit



Power up to six components in your rack setup. The board has 6 IEC outlets and mounting brackets at 90° so it can be mounted vertically or horizontally depending on your setup. Don't trust the dodgy power you get in most venues. Give your expensive gear all the protection and filtering it needs.

- Overload and surge protected
- · Fuse protected
- 10A input 6 x IEC outlets
- Cable length: 1.8m Dimensions: 482(W) x 46(H) x 46(D)mm



6 Way PDU with Surge & Overload Protection

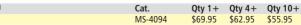


Power up to six components in your rack setup. The board has 6 conventional 240V outlets and fits any standard 19" rack. It actually takes a little more than one rack unit, but mounts on 1U centres.

- 1U rack space
- Overload protected
- Lead length: 1.6m
- Dimensions: 482(W) x 46 (H) x 46(D)mm







· Cooling fan hole

Camlock closures

Lift off side panels

Front, sides and back lock separately

19" RACK MOUNT CABINETS & ACCESSORIES

19" Rack Mount Cabinets

Ideal for studios, PA, sound reinforcement, IT, or phone systems installations, with a size and configuration to suit any application. Coupled with our wide range of accessories and options, these 19" rack cabinets offer outstanding features. All come in 1.8mm solid steel powder coated cabinets with clear tempered glass doors. The sides can be removed for installation or maintenance access and all panels are key-lockable.

- · High strength and rigidity under load
- Contemporary design
- Wall mounting without brackets
- Static loading capacity 60KG
- Top or bottom cable entry

Dimensions: 530(W) x 380(H) x 450(D)mm Cat HB-5170

• 530(W) x 493(H) x 450(D)mm Cat HB-5172

• 530(W) x 626(H) x 450(D)mm

7		Cat.	Qty 1+	Qty 4+	Qty 10+
	6U Rack Mount	HB-5170	\$179.00	\$160.95	\$142.95
	9U Rack Mount	HB-5172	\$219.00	\$196.95	\$174.95
	12U Rack Mount	HB-5174	\$259.00	\$235.00	\$209.00

Swing Frame Rack Mount Enclosure

Swing frame enclosures allow you to access the rear of your rack system for maintenance or easier installation Tempered glass doors and locking panels all round. 6 or 12 unit enclosures available

• 600(W) x 380(H) x 610(D)mm Cat HB-5180

• 600(W) x 630(H) x 610(D)mm Cat HB-5182

7		Cat.	Qty 1+	Qty 4+	Qty 10+	
	6U Swing Frame Rack Mount	HB-5180	\$249.00	\$225.00	\$198.95	
	12U Swing Frame Rack Mount	HB-5182	\$329.00	\$299.00	\$265.00	

Open Wall Mount Rack Enclosures

Ideal for mounting in other enclosures, such as road cases, but can also be mounted stand-alone. One side is hinged so that patch panels can be easily accessed at the rear for reconfiguring patch sets.

2U OPEN WALL MOUNT RACK ENCLOSURE Cat HR-5190

485(W) x 95(H) x 300(D)mm

4U OPEN WALL MOUNT RACK ENCLOSURE

Cat. HB-5192

• 485(W) x 190(H) x 300(D)mm

	,				
7		Cat.	Qty 1+	Qty 4+	Qty 10+
	2U Open Wall Mount Enclosure	HB-5190	\$39.95	\$35.90	\$31.90
	4U Open Wall Mount Enclosure	HB-5192	\$49.95	\$44.90	\$39.90

2U Universal Adjustable Rack Support Shelf

Capable of accommodating 2U sized rack equipment of various lengths. The modular design allows you to slide the rack out to the correct length of the device. Mounting holes are littered down the body of each shelf to allow for the variety of custom installations this may be used for. Though not recommended, the stopping pin on the slide could be bent down transforming it into a fully removable support

- Galvanised steel construction
- Suits 2U sized equipment
- Suitable handles available
- separately (HB-5458) Suits UPS MP-5212 on page 307
- Dimensions (when expanded): 930(L) x 88(H)mm
 Dimensions (when contracted): 531(L) x 88(H)mm

7		Cat.	Qty 1+	Qty 4+	Qty 10+
Su	pport shelf	HB-5456	\$69.95	\$62.95	\$55.95
На	ndles (pair)	HB-5458	\$16.95	\$14.95	\$13.35

19" Rack Panels

1U 12 X XLR SOCKET PANEL Dimensions: 483(W) x 45(H)mm Cat HB-5436

311 3 Χ ΕΔΝ ΡΔΝΕΙ

 Dimensions: 483(W) x 133(H)mm Cat HB-5438



1U BLANK

• Dimensions: 483(W) x 45(H)mm Cat HB-5420

2U BLANK · Dimensions: 483(W) x 89(H)mm Cat HB-5422

1U - VENTED

Dimensions: 483(W) x 45mm(H) Cat HB-5424

2U - VENTED

 Dimensions 483(W) x 89(H)mm Cat HB-5426

Rack Cable Supports

 Dimensions: 483(W) x 45(H) x 62(D)mm Cat HB-5430

2U Dimensions 82(D)mm

Cat HB-5432



483(W) x 89(H) x

Patch Lead Management Panel

- 1U size
- Dimensions: 483 x 45mm Cat HB-5434



Ball Bearing Sliding Rack Shelf

• Dimensions: 483(W) x 52(H) x 350(D)mm



Fixed 19" Rack Shelves

 Dimensions: 483(W) x 45(H) x 305(D)mm Cat HB-5452

 Dimensions: 483(W) x 89(H) x 380(D)mm Cat HB-5454



RELATED PRODUCT

For full details on this range see page 119

Accessories

BRAKED CASTORS

- Ball bearing swivel castors
- universal mounting plate
- Suitable for rack cabinets.
- speaker boxes, etc.
- Sold as a set of 4 Mount plate: 70(L) x 55(W)mm Wheel: 50(Dia) x 30(W)mm Overall Height: 75mm Cat HB-5470



ADJUSTABLE RACK FEET ENCLOSURE

- Adjustable height
- M12 threaded shaft
- Supplied with locking nut Sold as a set of 4



~	19" RACK PANEL ACCESSORIES	Cat.	Qty 1+	Qty 4+	Qty 10+
	1U 12 x XLR SKT Panel	HB-5436	\$12.95	\$11.35	\$10.35
	3U 3 x Fan Panel	HB-5438	\$19.95	\$17.70	\$15.70
	1U Blank Panel	HB-5420	\$10.50	\$9.25	\$8.25
	2U Blank Panel	HB-5422	\$12.95	\$11.35	\$10.35
	1U Vented Blank Panel	HB-5424	\$18.95	\$16.95	\$14.95
	2U Vented Blank Panel	HB-5426	\$27.95	\$24.95	\$22.35
	1U Rack Cable Support	HB-5430	\$24.95	\$22.35	\$19.70
	2U Rack Cable Support	HB-5432	\$29.95	\$26.90	\$23.70
	1U Patch Lead Management	HB-5434	\$29.95	\$26.90	\$23.70
	1U Ball Bearing Shelf	HB-5450	\$99.00	\$88.95	\$78.95
	1U Fixed Rack Shelf	HB-5452	\$49.00	\$43.95	\$38.95
	2U Fixed Rack Shelf	HB-5454	\$69.00	\$61.95	\$54.95
	Braked Castors - Set of 4	HB-5470	\$29.95	\$26.90	\$23.70
	Adjustable Feet - Set of 4	HB-5472	\$19.95	\$17.70	\$15.70

CAT5/6 CABLES

Cat5e Patch Leads

RJ45 to RJ45.
• 350MHz stranded cable.



7	Colour	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	Blue	0.5m	YN-8200	\$3.25	\$2.90	\$2.60
	Blue	1.0m	YN-8201	\$3.95	\$3.45	\$3.15
	Red	1.0m	YN-8211	\$3.95	\$3.45	\$3.15
	Yellow	1.0m	YN-8221	\$3.95	\$3.45	\$3.15
	Green	1.0m	YN-8231	\$3.95	\$3.45	\$3.15
	Blue	2.0m	YN-8202	\$5.25	\$4.60	\$4.15
	Red	2.0m	YN-8212	\$5.25	\$4.60	\$4.15
	Yellow	2.0m	YN-8222	\$5.25	\$4.60	\$4.15
	Green	2.0m	YN-8232	\$5.25	\$4.60	\$4.15
	Blue	3.0m	YN-8203	\$6.95	\$6.25	\$5.50
	Blue	5.0m	YN-8204	\$8.95	\$7.95	\$6.95
	Blue	10.0m	YN-8205	\$14.95	\$13.35	\$11.70
	Blue	15.0m	YN-8206	\$21.95	\$19.70	\$17.35
	Blue	20.0m	YN-8207	\$24.95	\$22.35	\$19.70
	Blue	30.0m	YN-8208	\$37.95	\$33.95	\$30.45

Crossover Cables

Crossover cable eliminates the need for a hub when connecting two computers.

7	Colour	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	Black	2.0m	YN-8272	\$6.50	\$5.75	\$4.95
	Black	5.0m	YN-8274	\$10.50	\$9.25	\$8.25
	Black	10.0m	YN-8275	\$16.00	\$14.35	\$12.70

Retractable Cat5 Cable - 1.5m

Handy retractable Cat5 cable. suitable for LAN, Ethernet or modem connection. Retracts to store away easily and reduce clutter in your workspace. Particularly handy for business travellers.



For full range of Wallplates and Keystones see page 175 & 316

Cat 6 Patch Cables Range of Cat6 cables from 500mm to 10m.

Patch leads meet TIA/EIA 568B2.150 microns of gold plating on each

Available in lengths from 500mm to 10m.







7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	0.5m	YN-8280	\$3.95	\$3.45	\$3.15
	1.0m	YN-8282	\$4.95	\$4.45	\$3.90
	2.0m	YN-8284	\$6.95	\$6.25	\$5.50
	3.0m	YN-8286	\$8.95	\$7.95	\$6.95
	5.0m	YN-8288	\$12.95	\$11.35	\$10.35
	10 0m	VNI_8290	\$21.95	\$19.70	\$17.35

Computer Cable Travel Kit

Over 900mm of pull to extend cable for RJ11 to RJ11, USB A/M to USB A/E USB A/M to USB A/M, and FireWire 1394 6P/M to 6P/M. The kit also has an earphone and microphone with 3.5mm plugs, a mini USB optical mouse, and 4 way USB hub.

- USB A/M to A/M Connector
- USB A/M to B/M Connector
- USB A/M to Mini 5P/M Connector
- FireWire 1394 6P/F to 4P/M Connector
- USB A/M to Mini 4P/M Connector
- RJ11 to USB A/F Connector(*2PCS)
- RI45 USB A/F Connector(*2PCS)
- RJ45 Crossover Connector
- USB A/M to USB A/M Cable
 USB A/M to USB A/F Cable
- FireWire 1394 6P/M to 6P/M Cable
- 3.5mm Earphone and Microphone
 RJ11 to RJ11 Cable
- 4 Port USB Mini Hub Mini USB optical Mouse





7	Cat.	Qty 1+	Qty 4+	Qty 10+
	XM-5280	\$24.95	\$22.35	\$19.70

USB 3.0 LEADS & ADAPTORS

High Quality USB 3.0 Male to Male Cable

Superior quality high speed USB 3.0 cables for your nextgen USB devices. Shielded for protection against EMI. Conforms to USB 3.0 standards - 4.8Gbps.

1.8m cable

MALE A TO MALE B LEAD

Cat WC-7782



7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.8m	WC-7782	\$17.95	\$15.95	\$14.35

WC-7770

IISR 3 0 MALE A TO MALE A LEAD

USB 3.0 Plug A to Plug A Lead 1.8m

Length



\$14.95

USB 3.0 MALE A TO MALE B LEAD 1.8M USB 3.0 is here and offers data rates of up to

4.8Gbps - a quantum improvement over USB 2.0. • 1.8m long USB 3.0 plug A to plug B lead



\$13.35

\$11.70

7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.8m	WC-7772	\$14.95	\$13.35	\$11.70

Powered USB 3.0 **Extension Lead 5m**

Suitable for high speed USB 3.0 applications. USB A plug to socket, 5m.



7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	5.0m	XC-4126	\$49.95	\$44.90	\$39.90

USB 3.0 Adaptors

PLUG B TO SOCKET A ADAPTOR Cat PA-0930

MICRO B PLUG TO SOCKET A ADAPTOR Cat PA-0931

SOCKET A TO A GENDER CHANGER Cat PA-0932

PLUG MICRO B TO SOCKET B ADAPTOR



Cat 1A-0333					
7	Cat.	Qty 1+	Qty 4+	Qty 10+	
Plug B to Socket A	PA-0930	\$9.95	\$8.75	\$7.75	
Micro B Plug to Socket A	PA-0931	\$9.95	\$8.75	\$7.75	
Socket A to A Gender Changer	PA-0932	\$9.95	\$8.75	\$7.75	
Plug Micro B to Socket B	PA-0933	\$9.95	\$8.75	\$7.75	

High Quality USB 2.0 Leads

High quality USB 2.0 leads for your PC peripherals, professional audio or camera equipment. Superior shielding protects against potential electromagnetic interferences and ensures data continuity. 24K Gold plated connectors

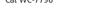
• 1.8 metres

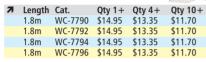




USR A TO USR A MALE







Retractable Lead for iPhone®/iPad®/ iPod® - 1 Metre

Full length cables become easily tangled and damaged inside bags as we carry them with us. Our range of high quality and durable retractable leads extends to your desired length as required and retracts easily after you're done. Convenient for travel, it's easy to pack up and stores

CONCORD . neatly.

USB A PLUG TO USR A **SOCKET WHITE**

USB A PLUG TO USB A PLUG WC-7735



USB A PLUG TO USB MICRO B SOCKET WHITE

USB A PLUG TO USB MINI B SOCKET WHITE WC-7737

7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.0m	WC-7734	\$14.95	\$13.35	\$11.70
	1.0m	WC-7735			\$11.70
	1.0m	WC-7736	\$14.95	\$13.35	\$11.70
	1.0m	WC-7737	\$14.95	\$13.35	\$11.70

Active USB 2.0 Extension Leads

Extend your USB devices. A built-in extender allows you to put data over longer distances. All use USB timing and electrical specifications that eliminate signal errors you may get in passive cables. USB 2.0 or 3.0, male to female and cables can be joined up to 25 metres.



7	Cat	Qty 1+	Qty 4+	Qty 10+
5m	XC-4839	\$24.95	\$22.35	\$19.70
10m	XC-4120	\$39.95	\$35.90	\$31.90
20m	XC-4124	\$49.95	\$44.90	\$39.90

STORE DETAILS

For store locations and opening hours see the back cover of this catalogue or download our "Store Locator App".

USB 2.0 Powered Extension Lead with 4 Port Hub

Extend your printer or any other USB device as far as 10 metres away from your PC. A 4-port hub adds extra flexibility. Powered by USB from the host computer.







USB RJ45 Extension Adaptor



Connect any USB device to your computer from up to 50 metres away via a standard Cat 5 network cable. Now you can have your printer, webcam, keyboard, mouse or any other USB device exactly where you want it without having to move your computer around.

- PC and Mac compatible
- Requires standard Cat 5e cables
- Supports USB 1.1
- Transmitter & Receiver included

7	Cat	Qty 1+	Qty 4+	Qty 10+
	XC-4884	\$39.95	\$35.90	\$31.90

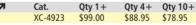
USB 2.0 Extension Adaptor

Overcome the 5m length limitation of USB cables with this robust solution. It's comprised of two units, a sender which connects to your PC and a receiver for connection to the USB devices. The sender and

receiver are connected with a common cat5 cable which allows extension of up to 90m giving you greater choice in deciding where to place your USB webcam, printer, scanner etc.



- Sender connectors: USB Type A Male, RJ45 Female
- Receiver connectors: USB Type A Female, RJ45 Female, DC Port Supports Windows XP,
- Windows Vista, Windows 7
- Sender dimensions: 60 x 20 x 30mm
- Receiver dimensions: 60 x 20 x 30mm
- Cat. Otv 1+ Otv 4+



Digital Camera Lead

USB A MALE TO B

MINI CAMERA MALE Suits many digital cameras such as Kodak.



7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.8m	WC-7722	\$9.95	\$8.75	\$7.75

USB A TO USB MICRO B LEAD

• 1.8m length.



7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.8m	WC-7724	\$9.95	\$8.75	\$7.75

USB 2.0/480 PLUG A TO 5 PIN MINI-B

Use this to connect your PC to a digital camera or cam-corder. USB 2.0 compliant. A size

male to B size mini male Suits Sony PSP®

Zength Cat. Qty 1+ Qty 4+ Qty 10+ WC-7710 \$9.95 1.8m \$8.75 \$7.75

USB 2.0 A TO B

- USB 4 Pin (A) Male to
- USB 4 Pin (B) Male Conforms to USB 2.0 standard - 480Mbps



	7	Length		Qty 1+	Qty 4+	Qty 10+
		1.8m	WC-7700	\$9.95	\$8.75	\$7.75
		3m	WC-7701	\$11.95	\$10.70	\$9.50
	NEW	5m	WC-7706	\$14.95	\$13.35	\$11.70

USB 2.0 A TO A

- **EXTENSION LEAD** . USB 4 Pin (A) Male to
- USB 4 Pin (A) Female
- Conforms to USB 2.0 standard - 480Mbps



7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.8m	WC-7702	\$9.95	\$8.75	\$7.75
NEW	3.0m	WC-7703	\$11.95	\$10.70	\$9.50

USB 2.0 A TO A

- USB 4 Pin (A) Male to USB 4 Pin (A) Male
- Conforms to USB 2.0 standard - 480Mbps



_		_			
7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.8m	WC-7704	\$9.95	\$8.75	\$7.75

IP67 Rated Type B USB Cable

Popular USB Type B connector. IP67 rated for harsh environments, with 1 metre cable extension. Plug or socket available:

- PP-0785: Type B USB Plug Cable 1 metre
- PS-0781: Type B USB Socket Cable 1 metre





Cat.	Qty 1+	Qty 10+	Qty 50+
PP-0785	\$16.95	\$14.95	\$13.35
PS-0781	\$18.95	\$16.95	\$14.95

Panel Mount Type B USB Socket

- · Suits panels up to 10mm thick
- Mounting hole 20mm



7	Cat.	Qty 1+	Qty 10+	Qty 50+
	PS-0783	\$19.95	\$17.70	\$15.70

BNC TERMINATOR

BNC Terminator Plug

To terminate BNC sockets

Built-in 50Ω resistor.



7	Cat.	Qty 1+	Qty 10+	Qty 50+
	PP-0655	\$4.95	\$4.45	\$3.90

IEEE1394 LEADS

High Quality IEEE1394 Cables

Also known as FireWire, i.Link or Lynx cables, IEEE1394 is commonly used in digital audio/video and automotive applications. This range of high quality IEEE1394 cables boast 24K gold plated connectors, 99.9% oxygen free copper conductors and are shielded against EMI. If you require near faultless data streams these cables are hard to



IFFF1394 9-PIN TO **IEEE1394 9-PIN CABLE**

1.8m Cat WC-7630



IFFF1394 9-PIN TO IEEE1394 4-PIN CABLE

• 1.8m Cat WC-7632



IEEE1394 9-PIN TO IEEE1394 6-PIN CABLE

• 1.8m Cat WC-7634



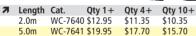
7	Cat	Qty 1+	Qty 4+	Qty 10+
9 to 9 pin	WC-7630	\$19.95	\$17.70	\$15.70
9 to 4 Pin	WC-7632	\$19.95	\$17.70	\$15.70
9 to 6 Pin	WC-7634	\$19.95	\$17.70	\$15.70

IEEE1394 FIREWIRE LEADS

FireWire® is a high-speed serial bus standard which bridges the world of consumer electronics and computers. Allows users to attach camcorders, VCRs, DVD and other audio / video components to their computers and printers.

FIREWIRE® 4 PIN TO 4 PIN





FIREWIRE® 6 PIN TO 6 PIN





FIREWIRE® 4 PIN TO 6 PIN



7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	2.0m	WC-7647	\$12.95	\$11.35	\$10.35
	5.0m	WC-7648	\$19.95	\$17.70	\$15.70

DVI VIDEO CABLES

DVI TO DVI VIDEO CABLE

- Can be used for DVI-A or DVI-D
- Male to Male
- 24 pin
- 2m



7 Length Cat. Cat. Qty 1+ Qty 4+ Qty 10+ WC-7590 \$29.95 \$26.90 \$23.70 2.0m

DVI-A TO VGA VIDEO CABLE

- DVI to 15pin
- HD VGA
- 2m



Qty 10+ Length Cat. Qty 1+ Qty 4+ 2.0m WC-7594 \$24.95 \$22.35 \$19.70

LAPLINK CABLES

RS-232 SERIAL LAPLINK CABLE



7 Length Cat. Qty 1+ Qty 4+ Qty 10+ 1.8m WC-7514 \$19.95 \$17.70 \$15.70

MAKE YOUR OWN INTERNAL CABLES

See page 192 for our range of IDC connectors and page 205 for ribbon cable.

For more data and other information don't foraet to check out our website.



SERIAL CABLES

DR9 MALE TO DB9 FEMALE **EXTENSION CABLE** All pins wired straight through.



Length Cat. Qty 1+ Qty 4+ Qty 10+ 1.8m WC-7534 \$9.95 \$8.75 \$7.75

DB9 FEMALE TO DB9 FEMALE NULL MODEM



Qty 10+ Length Cat. Qty 1+ Otv 4+ WC-7513 \$11.95 1.8m \$10.70

DR9 MALE TO DR9 MALE



Qty 10+ Length Cat. Qty 1+ Qty 4+ 1.8m WC-7535 \$9.95 \$8.75 \$7.75

RS-232 CONNECTING CABLE DB25 Male to

DB25 Male



Length Cat. Qty 1+ Qty 4+ 1.8m WC-7502 \$13.95 \$12.35 \$10.95 Otv 1+ Qty 4+ Qty 10+ Cat. 3.0m WC-7504 \$19.95 \$17.70 \$15.70

RS-232 **EXTENSION CABLE** DB25 Male to DR25 Female



Length Cat. Qty 1+ Qty 10+ WC-7508 \$13.95 1.8m \$12.35 \$10.95 3.0m WC-7510 \$19.95 \$17.70 \$15.70

SERIAL **MODEM CABLE**

DB25 Male to DB9 Female



Qty 10+ 7 Length Cat. Qty 1+ Qty 4+ WC-7516 \$11.95 1.8m \$10.70 \$9.50 3.0m WC-7518 \$13.95 \$12.35 \$10.95

MONITOR CABLES

VGA MONITOR EXTENSION DB15HD male to DR15HD female



∄ Length Cat. Qty 10+ Qty 1+ Qty 4+ 1.8m WC-7500 \$11.95 \$10.70 \$9.50

VGA MONITOR CONNECTING CABLE DB15HD Male to

DB15HD Male



Length Cat. Qty 1+ Qty 4+ WC-7582 \$11.95 \$10.70 \$9.50 1.8m

XVGA MONITOR CONNECTING CARLES

- DB15HD male to DB15HD male
- Ferrite supression on both ends
- Superior electrical screening



7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	2.0m	WC-7586	\$18.95	\$16.95	\$14.95
	5.0m	WC-7588	\$39.95	\$35.90	\$31.90
	10.0m	WQ-7258	\$49.95	\$44.90	\$39.90
	15.0m	WQ-7257	\$69.95	\$62.95	\$55.95

DB15HD MALE TO 5 BNC PLUGS

BNC plugs with red, green, blue, black & grey coloured cable



PRINTER CABLE

D25 TO CENTRONICS CONNECTOR - 1.8M



Length Cat. Qty 10+ WC-7522 \$14.95

KEYBOARD & MOUSE LEADS

PS/2 KEYBOARD/MOUSE **EXTENSION**

6 Pin Mini DIN Male to Female



1 Length Cat. Qty 1+ Qty 4+ Qty 10+ WC-7532 \$8.95 \$7.95 \$6.95

PS/2 6 PIN MINI DIN Male to Male



7 Length Cat. Qty 1+ Qty 4+ Qty 10+ WC-7533 \$9.95

KEYBOARD. MOUSE. MONITOR LEAD FOR PS/2 SWITCHBOX

Combined keyboard, mouse and monitor lead to provide a neat connection between your computer and PS/2 switchbox (XC-5066). A considerable saving compared to buying three separate cables. Colour coded connectors

· Ferrite suppression on monitor lead



GAMES LEADS

USB TO 2 X PS/2 LEAD ADAPTORS

Plug your PS/2 compatible mouse and keyboard into one USB port of your PC or notebook

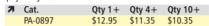


Length Cat. Qty 4+ Qty 10+ Qty 1+ WC-7571 \$24.95 0.3m \$22.35 \$19.70

GENDER CHANGERS

DVI-A PLUG TO VGA SOCKET

For connecting DVI-A or DVI-I video cards with VGA monitors. · Note: Will not display the digital video signal from a DVI-D output, even though the plug physically fits.



DB9

All pins wired straight through



7	Cat.	Qty 1+	Qty 4+	Qty 10+
Male/Male	PA-0900	\$5.95	\$5.25	\$4.75
Female/Female	PA-0901	\$5.95	\$5.25	\$4.75
			_	

DB15 All pins wired straight through



DB15 HIGH DENSITY All pins wired straight through.



7	Cat.	Qty 1+	Qty 4+	Qty 10+
Male/Male	PA-0875	\$6.95	\$6.25	\$5.50
Female/Female	PA-0876	\$6.95	\$6.25	\$5.50

DB25 All pins wired straight through.



7	Cat.	Qty 1+	Qty 4+	Qty 10+
Male/Male	PA-0881	\$6.95	\$6.25	\$5.50
Female/Female	PA-0884	\$6.95	\$6.25	\$5.50

Right Angle Male to Female Adaptors

DB9 Male to DB9 Female Cat PA-0908 DB15HD Male to DB15HD Female







7	Cat.	Qty 1+	Qty 4+	Qty 10+
DB25F/DB9M	PA-0882	\$5.95	\$5.25	\$4.75
DB25M/DB9F	PA-0887	\$5.95	\$5.25	\$4.75

KEYBOARD/MOUSE ADAPTORS

5 PIN DIN MALE TO **6 PIN MINI DIN FEMALE** 5 PIN DIN SOCKET TO 6 PIN MINI DIN PLUG





7	Cat.	Qty 1+	Qty 4+	Qty 10+
	PL-0940	\$7.95	\$6.95	\$6.25
	PL-0941	\$7.95	\$6.95	\$6.25

USB ADAPTORS

"Δ" FFMΔIF TO "A" FEMALE

RIGHT ANGLE "A" MALE TO "A" FEMALE







7	Cat.	Qty 1+	Qty 4+	Qty 10+
Skt to skt	PA-0921	\$7.95	\$6.95	\$6.25
Angle Up	PA-0926	\$7.95	\$6.95	\$6.25
Angle Down	PA-0927	\$7.95	\$6.95	\$6.25





Cat.	Qty 1+	Qty 4+	Qty 10+
PA-0915	\$7.95	\$6.95	\$6.25
PA-0917	\$7.95	\$6.95	\$6.25

CONFIGURABLE RJ45 ADAPTORS

DB25 MALE TO RJ45 8 X 8 SOCKET Unwired



Approved

7	Cat.	Qty 1+	Qty 4+	Qty 10+
DB25 Male	PA-0904	\$7.95	\$6.95	\$6.25

DB25 FEMALE TO RJ45 8 X 8 SOCKET

Unwired



ACA Approved

DB25 Female PA-0905 \$7.95 \$6.95 \$6.25	7	Cat.	Qty 1+	Qty 4+	Qty 10-
	DB25	Female PA-0905	\$7.95	\$6.95	\$6.25

DB9 SOCKET TO RJ45 Socket Adaptor. Unwired





VIDEO ADAPTOR

DIGITAL VIDEO INTERFACE Female to female

Compatible with DVI-I single dual link, DVI-D single/dual link & DVI-A male

All pins wired straight through



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	PA-0896	\$23.95	\$21.35	\$18.95

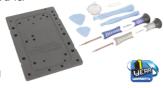
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TOOL KITS

Tool Set Repair Kit for iPhone®

The tools you need to safely open up your iPhone® and put it back together again. Suits iPhone® 3G, 3GS & 4G

- 2 x Plastic opening levers
 1 x Guitar Pick Opening Tool
 1 x Pentalobe Screwdriver TS1
- 1 x Phillips Screwdriver PH00 • 1 x Suction Cap
- 1 x Sim card ejector pin tool • 1 x Phone mounting bracket / Screw hold marker



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2112	\$12.95	\$11.35	\$10.35

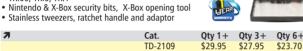
Gaming Console Tool Kit

If you have ever attempted any repair or improvement on your gaming console, you know that the right tools can make the difference between a good experience and a bad one. Everything you need to get into your console and accessories. It includes tools for pretty much every console and

handheld on the market today WII, X-Box, Playstation etc. Carry case included.

Contents:

- PH000, PH00, PH0, PH1
- Slotted 2, 3, 4mm
 T4, T5, T6, T8, T10, T15, T20, TA2, TA2.3
- TRI00, TRI0, TRI1
- Nintendo & X-Box security bits. X-Box opening too



Computer Service Tool Kit

- IC inserter/extractor Pearl Catch
- Tweezers 1/4" Nutdriver
 3/16" Nutdriver

- Parts tube for storage
 Double ended 10/15 Torx driver
 #1 Phillips screwdriver
- #0 Phillips screwdriver
- 1/8" Slotted screwdriver
- 3/16" Slotted screwdriver
- Zipper case
 Size 220 x 155 x 38mm



512C 220 X 155 X 5611111				
7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2040	\$19.95	\$17.70	\$15.70

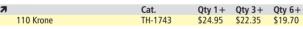
PUNCH DOWN TOOLS

Blade for Cat 5 Punch Tools

This blade suits our punch tool - TH-1740. Made from hardened SNCM-21, its blades are both changeable and reversible, and can be changed by hand, no screwdriver necessary. Blade retaining pressure with in 4-6 kg. One end of each blade has a cutter for that extra-neat termination, the other end is plain for those "linked" blocks.



RELATED PRODUCT



Cat 5 Punch-Down Tool / Stripper

LOW-COST. This versatile little tool will strip wire up to 5 to 6.2mm diameter, and doubles as a punch-down



Qty 1+ Qty 3+ Qty 6+ TH-1738

Cat 5 Punch-Down Tool - Adjustable

Has the same functions as the tool above, but has extra features to achieve the perfect 'punch' for different wire sizes. It has a turnable body, adjustable impact pressure and a storage compartment within the handle for holding a spare blade. Frame made of polyacetal resin with orange fibreglass handle. Supplied with 88 blade.

Spare blades see TH-1743

• Impact pressure: Low: 10 +/- 2kg (standard wire) High: 15 +/- 2kg



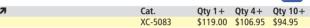


NETWORK & CABLE TESTERS

Network Cable Tracer

This tone generator is a highly practical network installation and troubleshooting tool which features a single/multi tone signal, test leads and a 4 conductor modular cable. The signal emitted by the tone generator can be easily traced by the companion probe, even when cables are in a bundle or hidden in punch down blocks or wall plates. The generator can also be used for checking telephone line polarity and status ie. Ring/Busy/Idle. The probe is equipped with an insulated inductive pick up and will amplify the tone signal to an audible level. A LED is also included as a visual indicator. The probe has a volume control and either indicator can be switched off if desired.

- The tone generator measures 115(L) x 60(W) x 30(D)mm.
- The signal leads are 185mm long and
- terminated with alligator clips.
 The modular lead is 250mm long
- and terminated a 4 pin RJ12 plug. The probe is 205mm long and approximately 35 (H) x 35 (D)mm.
- Both units operate from a 9 volt batteries (sold separately). Use our Cat. SB-2423
- Supplied in a protective zip up vinyl case.



Supplied in a

protective zip up

vinyl case.

Multi-Network Cable Tester with Pin-out Indication

This multi network cable tester is designed to guickly test UTP/STP/Coaxial/ Modular network cables by manually or automatically scanning the wires for continuity, mis-wiring and polarisation. It will sequence each connection and indicate the connections via two 9-way LED Bar graphs. Cables can be checked before or during

installation by using the Remote Terminator (included). This ingenious cable tester also allows ground-testing of shielded twisted-pair cables. Suitable for testing thin ethernet (BNC), 10 Base-T (UTP/STP), 356A, TIA-568A, TIA-568B and Token Ring network cables.

· Note: Not suitable for Live circuits.

Main unit supplied with:
• Active RJ45 terminator,

• 2 x RJ45 to BNC adaptors

Instruction manual

Specifications	
Dimensions	
Main Unit (LxWxD)	
Active Terminator	100 x 30 x 25mm
Power Supply	1 x 9V battery not supplied use our Eclipse Cat. SB-2423

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-5076	\$39.95	\$35.90	\$31.90

2 in 1 Network Cable Tester and Digital Multimeter

This innovative device is ideal for network installers or technicians and will allow the user to easily check cable integrity or measure AC & DC voltage, current, resistance, and continuity etc. without needing to carry two separate devices. The unit will check for cable continuity, opencircuits, short-circuits, and cross-connects etc. A remote terminator is included and enables the user to check network cables at a wall jack or patch panel. Supplied with loop back cable, LAN terminator, and multimeter leads.

LAN Tester Specifications:

- LAN tester checks faultsMis-wired conductors
- · Manual or automatic testing



DMM Specifications: 600 volt max input20M ohm resistance 200mA AC/DO • 3.5 digit

· Diode test · Max hold





LIE FIR

Cat Qty 4+ Qty 10+ \$71.95 XC-5078

ADSL2+ Line Filters

If you have an ADSL2+ Internet connection, you'll need a compatible filter to keep unwanted noise from the phone or fax line. ADSL filters are not suitable as they don't allow the 2.2MHz bandwidth required for ADSL2+ and you won't get the full speed of your connection. Three different types available, a single inline filter for use with extra phones or fax line, a filter/splitter for use with the primary line with the modem and phone line connected to it and a central filter for use when an alarm dialler or large number of phone outlets exist. Complies with ACIF S041.

ADSL2+ IN-LINE FILTER: Cat. YT-6091



ADSL2+ FILTER/SPLITTER: Cat. YT-6093 (NOT AVAILABLE IN NEW ZEALAND)

ADSL2+ CENTRAL FILTER: Cat. YT-609 (NOT AVAILABLE IN NEW ZEALAND)



7	Cat.	Qty 1+	Qty 5+	Qty 20+
	YT-6091	\$16.95	\$14.95	\$13.35
	YT-6093	\$22.95	\$20.35	\$18.35
	YT-6099	\$35.00	\$31.45	\$27.95

Cat 5 UTP Splitter

Cat 5 splitters enable two different devices to share the same Cat 5 cable. They are usually used in pairs, one at each outlet. Please note: you can't use this device to run two computers from one network port: you'll need a network switch for that This product is unsuitable for gigabit



ACMA Approved

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	YT-6090	\$16.95	\$14.95	\$13.35

Modular Double Adaptor

RJ45 8P/8C plug to two sockets. Wired straight through pin #1 to pin #1.





Modular Triple Adaptor RJ12 6P/4C

RJ12 plug to 3 sockets. Allows connection of 3 products to the 1 unit.

Cat







YT-6057 **CRIMPING TOOLS**

Cat.

6P/8P Modular Crimp Tool

This tool will crimp the following plugs: 6P2C, 6P4C - RJ12, 6P6C - RJ12, 8P - RJ45.



7	Cat.		Qty 3+	
	TH-1935	\$19.95	\$17.70	\$15.70

4P/6P/8P/10P Modular Crimp Tool

This great tool will cut, strip and crimp flat telephone cable, or Cat5e type cable also. Constructed from high quality carbon steel, it features interchangeable dies and ergonomic design. It also has a brace to lock them closed.







Telephone

For other telephone leads, adaptors -

see telephone section.

• Blister pack. • ACA Approved







7	Cat.	Qty 1+	Qty 5+	Qty 20+
	PS-1410	\$6.95	\$6.25	\$5.50
	PS-1412	\$6.95	\$6.25	\$5.50

Plug Adaptor 605 Type

Australian plug to RJ12 6P/4C or RJ45 8P/4C US socket. Includes reducing sleeve.



Socket Adaptor 610 Type

Australian socket to RJ12 6P/4C or RJ45 8P/4C US socket. Includes reducing sleeve.

Approved







Socket Double Adaptor 605 Type

Australian 605 plug to two Australian 610 sockets





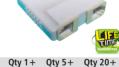
Cat.	Qty 1+	Qty 5+	Qty 20+
YT-6020	\$6.95	\$6.25	\$5.50

Double Adaptor

Australian plug to two RI12 6P/4C US sockets

Slimline package

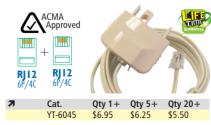




	Diversity	Aughelien	Dive	
	YT-6023	\$6.95	\$6.25	\$5.50
•	cut.	4.,	Qty 3.	Qty =o .

US Plug to Australian Plug

Includes Australian plug with RJ12 6P/4C socket in back and 2 metre lead with a RJ12 6P4C on each end.



CABLE STAPLE GUNS

Cable Staple Gun

Take the pain out of cable installation. Instead of trying to pound away with a hammer, simply staple the cable to eaves, rafters or joists. The staples have an integral plastic cable clamp that holds the cable firmly in place. Each gun takes a variety of staples sizes to accommodate cables up to 12.5mm diameter.

- Includes gun, interchangeable blades and 200 staples
 Refill staples available



Freecall order hotline: 1800 022 888



TH-2615

US Modular Inline Coupler Socket To Socket 6P/4C







7	Cat.	Qty 1+	Qty 5+	Qty 20+
	YT-6060	\$5.95	\$5.25	\$4.75

Modular Inline Joiner RJ45 8P/8C







Cat.

YT-6081





US	Modular	Skirting	Moun

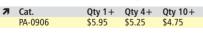


DB9 Socket to RJ45









DB25 Plug to RJ45 8P/8C Socket Adaptor



\$7.95

\$6.95

\$6.25

DB25 Socket to RJ45 8P/8C Socket Adaptor

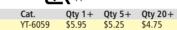


Wall Socket 6P/4C

Square wall socket to suit RJ12 6P/4C plugs. Screw terminals for connection. • 44 x 44 x 24(D)mm







RJ45 Side Entry Surface Mount 8P/8C

Side entry surface mount voice grade US modular socket. Snap-on cover provides access to screw terminals for connection of wires. Double sided tape included for easy installation.

· Beige colour suits most environments.





RJ45 to RJ12 Reducers

These sleeves reduce a RJ45 size socket to a RJ12 size. This allows RJ45 sockets to accept either RI12 or RJ45 plugs.

 Sleeves are ivory in colour.

• Pack of 5.					
7	Cat.	Qty 1+	Qty 5+	Qty 20+	
Pkt 5	YT-6055	\$4.95	\$4.45	\$3.90	

Wall Phone Bracket RJ12 6P/4C

Wall phone bracket designed to allow easy installation

of telephones which have standard US modular wall mountings. The line is connected from bracket to phone by a 30mm modular

- Fits standard Australian electrical switch plate
- installation hardware. Fawn colour

Socket 6P/4C

76W x 119H x 9Dmm



YT-6062



Qty 5+

\$6.95

Qty 20+

\$6.25

Extension Cables RJ12 6P/4C

RJ12 6P/4C US Modular Plugs US plug to US plug. Colour Ivory.







7	Cat.	Qty 1+	Qty 5+	Qty 20+
300mm	YT-6044	\$3.95	\$3.45	\$3.15
1.0m NEW	YT-6042	\$4.95	\$4.45	\$3.90
3.0m	YT-6040	\$5.95	\$5.25	\$4.75
5.0m NEW	YT-6049	\$7.95	\$6.95	\$6.25
10.0m	YT-6041	\$11.95	\$10.70	\$9.50
15.0m	YT-6043	\$14.95	\$13.35	\$11.70

Extension Cables RJ12 6P/6C

These leads are used in many office telephone Commander type systems, where 6 wires are required. Leads are plug to plug.
• RJ12 6P/6C US Modular Plugs



RJ12	RJI2
6P/6C	6P/6C





7	Cat.	Qty 1+	Qty 5+	Qty 20+
1.0m NEW	YT-6033	\$9.95	\$8.75	\$7.75
3.0m	YT-6036	\$11.95	\$10.70	\$9.50
5.0m NEW	YT-6034	\$12.95	\$11.35	\$10.35
10.0m	YT-6037	\$13.95	\$12.35	\$10.95
15.0m	YT-6038	\$16.95	\$14.95	\$13.35

Replacement Handset **Curly Cord**

4P/4C US MODULAR PLUGS



7	Cat.	Qty 1+	Qty 5+	Qty 20+
3.0m Whi	te YT-6047	\$8.95	\$7.95	\$6.95
8.0m Ivo	ry YT-6048	\$12.95	\$11.35	\$10.35

RJ12 to RJ45 Modular Leads RJ12 6P/4C to RJ45 8P/4C

Colour: Ivory.





7	Cat.	Qty 1+	Qty 5+	Qty 20+
2.0m	YT-6086	\$8.95	\$7.95	\$6.95
3.0m	YT-6087	\$12.95	\$11.35	\$10.35

PA-0904

\$7.95

RJ45 MODULAR

Modular Plugs

50μ" Gold Contact

8/8 - RJ45 Not ACMA Approved

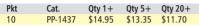
Pkt



PP-1436 \$7.95 \$6.95 \$6.25 **SCREENED 8 PIN FOR STRANDED CABLE**

8P8C with full screening and round cable entry for STP cable





8 PIN FOR CAT6 STRANDED CABLE

8P8C round cable entry for connection to Cat6 UTP.





RJ45 STRANDED Qty 5+ Qty 20+ Otv 1+ Pkt 10 PP-1447 \$12.35 \$10.95

8 PIN FOR FLAT STRANDED CABLE 8/8 - RJ45



8 PIN FOR ROUND SOLID CORE CABLE

8/8 RJ45 Suits Cat5e



RJ45 STRANI	DED	Qty 1+	Qty 5+	Qty 20+
Pkt 5	PP-1434	\$5.95	\$5.25	\$4.75
RJ45 STRANI	DED			
Pkt 50	PP-1435	\$29.95	\$26.90	\$23.70
RJ45 SOLID				
Pkt 6	PP-1438	\$6.95	\$6.25	\$5.50
RJ45 SOLID				
DL+ 50	DD 1/120	\$24.05	¢21 /5	¢27.00

RJ45 BOOTS

A packet of boots to suit RJ45 8/8 plugs.



			_	
Pkt	Cat.	Qty 1+	Qty 5+	Qty 20+
4	PM-1441	\$4.95	\$4.45	\$4.15
		Qty 1+	Qty 5+	Qty 20+
50 Blue	PM-1442	\$15.50	\$13.70	\$12.95

Look in our Connector section for our panel mount sockets..

RJ45 CONNECTORS IP67 RATED

This set of connectors makes it safe to use RJ45 connectors in harsh environments. Rated to IP67 they are dust tight and water tight making them handy for control and communications applications outdoors or industy workshops.



Туре	Cat.	Qty 1+	Qty 10+	Qty 50+	
Socket	PS-1450	\$27.95	\$24.95	\$22.35	
Plug	PP-1452	\$14.95	\$13.35	\$11.70	
Can	PP-1454	\$8.95	\$7.95	\$6.95	

RJ11/12 MODULAR

50μ" Gold Contact **4 PIN FOR** STRANDED CARLE 4/4 - RJ11



6 PIN FOR **STRANDED CABLE** 6/6 - RJ12



		rem mpp	loved		
RJ11		Qty 1+	Qty 5+	Qty 20+	
Pkt 5	PP-1430	\$2.45	\$2.15	\$1.95	
RJ11					
Pkt 50	PP-1431	\$19.95	\$17.70	\$15.70	
RJ12					
Pkt 5	PP-1432	\$2.95	\$2.60	\$2.30	
RJ12					
Pkt 50	PP-1433	\$23.95	\$21.35	\$18.95	

Australian / NZ Flush Plates

Our premium Australian / NZ flush plates not only accept our Cat 5e jacks shown below, they are also compatible with many other standard Australian mechanisms and jacks. The 2 piece design has a separate back plate and cover which is easily removed for painting.

- Fits standard Australian/NZ electrical switch plate installation hardware and screw centres.
- Perfect for easy flush installation on Gyprock walls.
 Supplied unloaded without jacks
- (see cat. YN-8036 below).
- Dimensions 116(W) x 75(H) x 13(D)mm.



cut. III	0013			
7	Cat.	Qty 1+	Qty 4+	Qty 10+
Single	YN-8015	\$5.95	\$5.25	\$4.75
Double	YN-8016	\$5.95	\$5.25	\$4.75
Triple	YN-8017	\$5.95	\$5.25	\$4.75

Keystone Wallplates

Flush type wall plates to accept our standard keystone 110 jacks. Fits standard Australian electrical switch plate installation hardware and screw centres, making it perfect for easy flush installation on plasterboard or other cavity walls.

- Supplied unloaded without keystone jacks
 Dimensions 70(W) x 114(H) x 6(D)mm



Cat.	Qty 1+	Qty 5+	Qty 10+
YN-8050	\$2.50	\$2.21	\$1.95
YN-8052	\$2.50	\$2.21	\$1.95
YN-8054	\$2.75	\$2.45	\$2.15
YN-8056	\$2.90	\$2.60	\$2.30
YN-8058	\$2.90	\$2.60	\$2.30
	YN-8050 YN-8052 YN-8054 YN-8056	YN-8050 \$2.50 YN-8052 \$2.50 YN-8054 \$2.75 YN-8056 \$2.90	YN-8050 \$2.50 \$2.21 YN-8052 \$2.50 \$2.21 YN-8054 \$2.75 \$2.45 YN-8056 \$2.90 \$2.60

RJ11 Socket 6P4C Keystone Jack

Kevstone Jack





YN-8026

Keystone Socket Jacks

RJ45 Socket CAT5E Keystone Jack - White YN-8028



RJ45 S YN-80		Keystone Jack
4	C-4	04.1.

			-	
7	Cat.	Qty 1+	Qty 5+	Qty 10+
Cat5e	YN-8028	\$4.95	\$4.45	\$3.90
Cat6	YN-8029	\$4.95	\$4.45	\$3.90

RJ45 Cat6 Keystone Socket - White

RJ45 Cat 6 Keystone Socket - white



Cat YN-8033 \$14.95 \$13.35 \$11.70

RJ12 IDC Socket for Flush Plates

Voice grade RJ12 6P4C IDC jack with 2 IDC connections per contact allowing easy loop-in, loop-out for typical voice applications. Compatible with most standard Australian flush plates. Rear termination with IDC impact tool.



Approved

7	Cat.	Qty 1+	Qty 5+	Qty 20+
	YN-8035	\$12.95	\$11.35	\$10.35

Cat5e IDC Jack to Suit Australian / NZ Style **Flush Plates**

Our premium Cat 5e IDC data jack is designed to suit our wallplates shown above. They also suit many other brands of Australian/NZ flush plates.

- Rear terminated with 110 or Krone impact tool
- T568A & T568B colour coding for easy installation.
- ACMA Approved
- Suit YN-8015/16/17 shown above.

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8036	\$12.95	\$11.35	\$10.35

Keystone Surface Box

Side entry surface mount boxes to accept our standard keystone

- Snap-on cover for easy installation &
- access to wiring.
 Single and duplex versions available.
- Double sided tape for easy installation.
- Supplied unloaded without

ACMA keystone jacks. Approved Colour is white.

→ WxHxD(mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
Single 30x60x26	YN-8022	\$5.95	\$5.25	\$4.75
Double 55x60x26	YN-8024	\$5.95	\$5.25	\$4.75

110 Keystone Jack

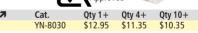
Suitable for use with our keystone wall plates and keystone surface boxes



 For termination with ISBY impact tool and has combined 568A and T568B colour coding for easy installation.

White in colour.





Cat5e Coupler 8P/8C

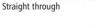
This coupler makes short work of small Cat 5 cabling jobs and enables premade cables to be used through-out. Simply clip into a wall plate and plug cables in on ACMA Approved both sides.

Qty 4+ Qty 10+ Cat. YN-8032 \$22.95 \$20.35

Cat5e Socket Coupler Straight

Use this jack connector to join two fabricated Cat 5e cables.

YN-8034





\$14.95

\$13.35

\$16.95

Power & Renewable Energy

Generating power off grid is becoming one of the largest categories in Jaycar's lineup. We have established a hard-won reputation for the best range of DC-AC inverters in Australia & New Zealand based on over 20 years of research and engineering refinements. Our POWERTECH brand is constantly specified for countless applications when reliable remote AC power is temporarily needed. The same goes for our wind generators.

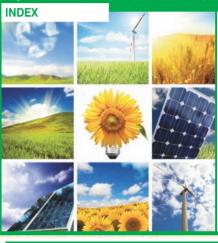
In 2011 we introduced a petrol powered inverter-type 2kW portable generator which has been very successful. So much so in fact that we have added a 3kW unit by popular demand.

Our solar panel range is still very, very popular despite Government indecisiveness regarding subsidies. We believe that our popularity in this area is underpinned by our commitment to keeping the "hard" parts. By this we mean the mounting hardware solutions, the wiring options, the specialised electrical connectors, voltage regulators and controllers etc.

We also carry probably the most comprehensive range of grid connect inverter/controllers and very large scale power management systems in Australia – made by Rich Electric. We have full time staff at Head Office who have the expertise to interpret your needs and design your system for you. And we have the battery systems as well.

On a smaller scale, we carry a great range of sealed, lead acid batteries for burglar alarms and other applications as well as chargers from the simple to the complex. We have big wet cell battery chargers, battery minders, automatic battery isolators, power transformers, power supplies. We have a fantastic range of AAA to everything-in-between in, Ni-Cd, Ni-MH, lithium, Li-ion etc batteries. We have the best range of alkalines, battery holders, leads, connectors and AC adaptors. We have timers, power meters and a great range of new powerboards.

Jaycar. When it comes to power, we've got you ZAPPED!



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PETROL GENERATORS

Sine Wave Inverter Generators

You can buy cheap 240V petrol generators for around \$500 these days, but they are inefficient, noisy and dangerous. Not dangerous for you, but for your 240V appliances. The problem is that due to their rudimentary output regulation, the engine must run at the one speed. Then, when they are working below the rated load of the generator the line voltage can increase from a nominal 230VAC to over 260VAC (in some cases up to and over 400VAC)! It is for this reason that we have never sold these products.

These inverter generator units are petrol powered and differ from cheaper units, in that the engine (which is built to the same design as the market leading Japanese brands) drives a DC alternator. A pure sine wave inverter then converts the DC to a stable pure sine wave 230VAC, suitable for appliances including sensitive electronics.

No matter what the load is on the generator or the speed of the engine, the output remains very well regulated. The added benefit is that the petrol motor is far better matched to the load, reducing overall size, keeping engine speed in line with the load, reducing noise and increasing fuel efficiency. Additional features include electric key start, electric remote start, low oil cut-out, and overload circuit breaker.

• Fuel indicator • Oil alert system • Circuit breaker without fuse • Circuit protector

Two models available 2kW Sinewaye 3kW Sinewave MG4502 MG4504 Forced air-cooled, 1 cylinder, 4-stoke, OHV Type Displacement 125cc 2.6KW/5000RPM 270cc 5.6kW/3600RPM Rated power output Max. power output 3.0KW/5500RPM 6.2kW/4200RPM Bore*Stroke(mm) 52.4 x 57.8mm T.D.I 77 x 58mm T.D.I Ignition system Engine Recoil start/Electric Starting system Recoil start/Electric/Remote Fuel tank capacity 13L 7.01 400g/Kw/h 450g/kW/h Fuel consumption Continous operating time 6.5 hours 7 hours Noise (7m away) 65dba 59dBa Rated output frequency 50Hz 50Hz Rated output voltage 230V 230\ D. C. Output 12V 8 3A 12V 8 3A Output sockets 2 (AUS type) 2 (AUS type) Generator Rated power output(KW) Max. power output(KW) 545(L) x 290(W) x 500(H)mm 600(L) x 510(W) x 565(H)mm Dimensions Net weight 28kg 55kg Qty 1+ Cat. Qty 2+

 Cat.
 Qty 1+
 Qty 2+

 2kW Sine Wave Generator
 MG-4502
 \$899.00
 \$855.00

 3kW Sine Wave Generator
 MG-4504
 \$1,499.00
 \$1,425.00

WHY YOU SHOULD NOT BUY THESE PRODUCTS FROM THE INTERNET.

There are many reasons for buying on the internet, price being the main one. Most people who sell things on the internet are good, reputable people. The nature of internet business, however, is that you see new things all the time, then they get replaced by other new things. Fine if you are buying shoes or a book but not so fine if you are buying a complex pick of machinest.

complex piece of machinery.

You can buy a similar, (we think inferior,) one of these generators on the internet for a fair bit less than our price. Or you can buy a brand-name one for about two and a half times what we charge.

Over the useful lifetime of the product, say 5-10 years, you will probably need a spare mechanical part. In all likelihood if you buy the internet generator you will have absolutely no chance of spare parts backup.

If you buy the name-brand product you will be supported with spare parts from their spare parts backup, probably through Aust/NZ wide dealers. If you buy the Jaycar generator you will get the same thing. Think about it.



WARNING!! These products are supplied without any oil in the sump. Oil MUST be filled prior to use. Refer to user manual.

\$809.00

\$1,349.00

Solar Panels – Monocrystalline

SOLAR PANELS - MONOCRYSTALLINE

5 Watt to 200 Watt Panels

5 WATT TO 40 WATT PANELS

Our Powertech monocrystalline solar panels offer you the same robust construction and performance as the leading brand names, whilst also offering a nice cost saving against the big brands. Despite being manufactured in China, they are most definitely built and suited to withstand harsh Australian conditions.

Each panel features a 3.2mm thick tempered glass front panel, which is capable of withstanding a 1 inch hailstone at terminal velocity, and is built with a sturdy extruded aluminium frame. Panels of 65W or greater size also feature TUV approved IP67 waterproof junction boxes and output leads with MC4 style waterproof connectors.

We stand by the quality of our Powertech solar panels, and so does our factory, which is why we are proud to support them with a 25 year warranty. This warranty covers the panels for defects in construction and manufacturing for a period of 24 months, and warrants that the electrical output will remain above 90% of original rated power for a period of 10 years, and remain above 80% of original rated output for 25 years. Each panel is uniquely identified with a serial number for warranty traceability,

POWERTECH

which is also logged with an initial performance report from the factory before being shipped out - so you can ensure that our factory is on top of quality assurance.



We know that many other companies offer a similar warranty on their solar panels - but you have to ask yourself if that company will still be around in 25 years, or maybe even 10 years. We've been around for over 30 years now, and we aren't going anywhere anytime soon...

For full specifications on our solar panels, see our website.

NOTE: Our ZM-9099 (175W) and ZM-9088 (200W) panels are listed as approved modules by the Clean Energy council under the factory's brand "Zhejiang Sopray", models SR-175 and SR-200 respectively. The Powertech brand is used for marketing purposes only.

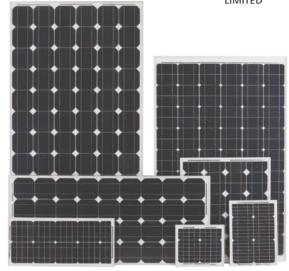
We will not be undersold on quality panels!



Cat.	ZM-9091	ZM-9093	ZM-9094	ZM-9095
Maximum power	5W	10W	20W	40W
Rated voltage	12V	12V	12V	12V
Open circuit voltage	21V	21.5V	21.5V	21.4V
Short circuit current	380mA	680mA	1.3A	2.56A
Voltage at max power	16.8V	17V	17.2V	17.1V
Current at max power	300mA	590mA	1.17A	2.34A
Dimensions	295 x 255 x 23mm	396 x 289 x 23mm	639 x 294 x 23mm	545 x 645 x 23mm
Weight	0.8kg	1.4kg	2.4kg	4.0kg



7	Voltage	Wattage	Cat.	Qty 1+	Qty 2+	Qty 4+
	12V	5W	ZM-9091	\$22.95	\$21.70	\$20.35
	12V	10W	ZM-9093	\$42.95	\$40.90	\$38.45
	12V	20W	ZM-9094	\$85.00	\$80.95	\$76.50
	12V	40W	ZM-9095	\$159.00	\$150.95	\$142.95



We will not be undersold on quality panels!

65 WATT TO 200 WATT PANELS

Cat.	ZM-9096	ZM-9097	ZM-9086	ZM-9098	ZM-9099	ZM-9088
Maximum power	65W	80W	90W	120W	175W	200W
Rated voltage	12V	12V	12V	12V	24V	24V
Open circuit voltage	17.2V	21.8V	22.2V	21.8V	43.7V	45.3V
Short circuit current	3.78A	5.23A	5.39A	7.14A	5.1A	6.15A
Voltage at max power	17.2V	17.6V	18V	17.8V	36.2V	37.8V
Current at max power	3.78A	4.55A	5A	6.74A	4.85A	5.31A
Dimensions	1210 x 540 x 28mm	1200 x 540 x 28mm	1200 x 540 x 28mm	1250 x 808 x 35mm	1580 x 808 x 35mm	1580 x 808 x 35mm
Weight	8.2kg	8.2kg	8.2kg	12kg	14.5kg	15.5kg





The larger (65W and above) panels are fitted with a TUV approved waterproof junction box with cable glands. They have short UV stabilised output cables and bypass diodes included.





Freecall order hotline: 1800 022 888

7	Voltage	Wattage	Cat.	Qty 1+	Qty 4+	
	12V	65W	ZM-9096	\$269.00	\$259.00	
	12V	80W	ZM-9097	\$289.00	\$275.00	
	12V NEW	90W	ZM-9086	\$325.00	\$305.00	
	12V	120W	ZM-9098	\$425.00	\$405.00	
	24V	175W	ZM-9099	\$619.00	\$589.00	
	24V NEW	200W	ZM-9088	\$699.00	\$659.00	



Solar Panel Hardware

SOLAR PANEL MOUNTING HARDWARE

Ecotech Professional Solar Mounting Hardware

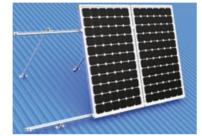
A universal and code compliant mounting system for attaching solar panels to the roof of your property. Designed to be used with either tiled or tin roofs, with any slope from 0-60° (either flat or pitched), and fully cyclone rated even for wind region D. The easy insertion modules mean that you don't have to slide each attachment along the rail to get it in place, they slot in quite easily at the very spot you want to attach them. For use with 35mm thick modules, a full range of components are available.

- Cyclone proof to Wind Region D (installation guide must be strictly adhered to)
 Vertical or horizontal panel mounting
 Suits any solar panel width, but optimised for 800-825mm width
 Suitable for aluminium framed panels

- 10 year materials warranty
- AS/NZS 1170 approved
- Roof slope: up to 60° Wind load: 80m/s
- Snow load: 1.4kNm²







Corrugated Iron Roof

Corrugated Iron Roof

RAILS & SPLICES

7		Cat.	Qty 1+	Qty 4+	Qty 10+
	2560mm Solar Panel Rail 3PV	HS-8800	\$49.95	\$44.90	\$39.90
	3405mm Solar Ecotech Rail	HS-8801	\$69.95	\$62.95	\$55.95
	4200mm Solar Ecotech Rail	HS-8802	\$84.95	\$76.50	\$67.95
	Solar Panel Mounting Rail Splice	HS-8803	\$9.95	\$8.75	\$7.75

CLAMPS, HOOKS & LEGS

	Cat.	Qty 1+	Qty 4+	Qty 10+
Solar Panel Rail End Clamp 35mm	HS-8804	\$3.95	\$3.45	\$3.15
Solar Panel Rail Mid Clamp 35mm	HS-8805	\$3.95	\$3.45	\$3.15
Solar Panel Tile Roof Hook	HS-8806	\$26.95	\$23.95	\$21.35
Solar Panel Tin Roof Hook	HS-8807	\$8.95	\$7.95	\$6.95
Solar Panel Adjacent Front Leg Tilt	HS-8810	\$15.95	\$14.35	\$12.70
Solar Panel Mounting Back Leg 10-15°	HS-8811	\$39.95	\$35.90	\$31.90
Solar Panel Mounting Back Leg 15-30°		\$49.95	\$44.90	\$39.90
Solar Panel Mounting Back Leg 30-60°	HS-8813	\$59.95	\$53.95	\$47.90

Universal Individual Solar Panel Mounting Bracket

Designed for mounting solar panels individually to a fixed surface, such as the roof of a caravan, motor home, shed, or any number of other applications. Not only do these brackets provide secure and easy mounting, but they also space the panel up to provide necessary airflow. Each bracket includes a stainless steel M6 bolt and nut to attach it to the factory holes in the aluminium frame of your solar panel, meaning that no drilling or modification is required. Sold individually, so you just have to purchase the quantity that suits your panel and application

- Made from 6061 aluminium alloy
- Recommended quantity for panels up to 40W: 4
 Recommended quantity for panels 40W-200W: 6
 Spacing from mounting surface: 22mm
 Dimensions: 80(L) x 68(W) x 35(H)mm





7	Cat.	Qty 1+	Qty 4+	Qty 10+
	HS-8780	\$7.95	\$6.95	\$6.25

For Smaller Systems

In response to requests from customers, we've arrived at a range of mounting hardware that is adaptable and modular to fit most applications - extruded mounting rails, brackets and joiners.



We have two sizes of durable extruded aluminium mounting rails that can be mixed and matched to fit virtually any size solar panel with slots that accommodate mounting brackets. There are 1m and 2m sizes available and you can join them together to extend as far as you need to:

SOLAR PANEL ALUMINIUM EXTRUDED RAIL 1M HS-8702 **SOLAR PANEL ALUMINIUM EXTRUDED RAIL 2M** HS-8700 JOINER BRACKET 80MM HS-8714

L-brackets to mount the rails to the roof.

L-TYPE BRACKET PKT 2

HS-8704

Brackets to clamp your panels onto the rails. These come in two different sizes and two different types - 28mm for 65 and 80 watt panels, and 35mm for 120 and 175 watt panels; Z-type for clamping the end of each panel and

T-type for clamping between two panels:

Z-TYPE 28MM BRACKET PKT 4 HS-8706 **Z-TYPE 35MM BRACKET PKT 4** HS-8708 T-TYPE 28MM BRACKET PKT 2 HS-8710 T-TYPE 35MM BRACKET PKT 2 HS-8712





7		Cat.	Qty 1+	Qty 4+	Qty 10+
	Aluminium Extruded Rail 1m	HS-8702	\$39.95	\$35.90	\$31.90
	Aluminium Extruded Rail 2m	HS-8700	\$69.95	\$62.95	\$55.95
	L-Type Bracket Pkt 2	HS-8704	\$34.95	\$31.45	\$27.90
	Z-Type 28mm Bracket Ptk 4	HS-8706	\$79.95	\$71.95	\$63.95
	Z-Type 35mm Bracket Pkt 4	HS-8708	\$79.95	\$71.95	\$63.95
	T-Type 28mm Bracket Pkt 2	HS-8710	\$39.95	\$35.90	\$31.90
	T-Type 35mm Bracket Pkt 2	HS-8712	\$39.95	\$35.90	\$31.90
	Joiner Bracket 80mm	HS-8714	\$19.95	\$17.70	\$15.70

SOLAR POWER CABLE

UV Stabilised Solar Power Cable

Very tough cable, specifically for the rigours of outdoor use in solar panel installations. Dust, age and UV resistant, tinned copper conductors to minimise corrosion. Use with our PV connectors for complete environmental protection.

Specifications		TUV Certified
WH-3120	2.5mm sq.	
WH-3121	4mm sq.	
WH-3122	6mm sq.	
Conductor material	Tin plate copper, Class 5	WH-3120
Insulation material	XLPO	WH-3120
Rated voltage	1000VD	
Rated current	42A (2.5mm) & 58A (4mm)	
Rateu current	& 76A (6mm)	WH-3121
Temperature range	-40 to - 125°C	THE REAL PROPERTY.
TUV certification	2 PfG 1161/01.06	
		WH-3122
 IP65 rated 		

ROLL LENGTH 100 METRES Price per metre

7	Cat.	1 + Metre	1 + Rolls	5+ Rolls
2.5mm ²	WH-3120	\$3.00	\$250.00	\$225.00
4.0mm ²	WH-3121	\$3.50	\$295.00	\$265.00
6.0mm ²	WH-3122	\$5.50	\$460.00	\$415.00

Renewable Energy -Design, Installation and Use

Renewable energy is expanding at an unprecedented rate. Solar panels are now commonplace and can be seen on suburban rooftops, factories and shops. Wind farms are a growth industry and small scale wind generators are commonly available, not to mention biofuels and micro hydro systems. Regardless of whether you live in the city, on the land or in a motorhome this book explains renewable energy in an easy-to-read and understand format and covers everything from basic electrical concepts through to system design



7	Cat.	Qty 1+
	BE-1538	\$38.95



Waterproof Solar Power "PV" Connectors

IP67 rated for maximum environmental protection, these photovoltaic (PV) system connectors are ideally suited to harsh installations such as solar panel arrays and other permanent outdoor applications. When matched with our solar power cables WH-3120 and WH-3122, you can leave your cabling out in the open with the knowledge that you will never have a bad connection or an oxidised power cable. Both panel mounting and in-line connectors are available to suit a wide range of system applications:

PS-5104

Assembly Tool: TH-1930 Suitable crimping tools: TH-1834/TH-1950

- Pin dimension 4mm
- Tin plated copper contacts
- Contact resistance $<5m\Omega$
- IP67 rated
- -40°C to +90°C
- Housing material PPO
 TUV certified

Specifications	
Rated voltage	1000VDC
Rated current	30A at 70°C, 25A at 85°C
Contact resistance	<5 milliohms
Temperature range	-40 - 90°C
TUV certification	2 PfG 1161/01.06



7	Size	Cat.	Qty 1+	Qty 10+	Qty 50+
	Female Inline	PS-5100	\$7.50	\$6.75	\$5.95
	Male Inline	PP-5102	\$7.50	\$6.75	\$5.95
	Female Panel Mount	PS-5104	\$7.50	\$6.75	\$5.95
	Male Panel Mount	PP-5106	\$7.50	\$6.75	\$5.95

IP67 Ferrule Crimp Solar PV Connectors

High quality solar PV connectors, featuring IP67 waterproof rating, UV resistant plastics, high current rating and TUV approval. These connectors differ from our PS-5100 and PP-5102 series of PV connectors in that they utilise a ferrule (or closed barrel) stroy and FF-3 series of FV commercials in that they defines a fertilet closed be type of crimp rather than an open barrel (or folding) type of crimp connection. This ensures a much higher strength crimp, as there is a solid "barrel" of metal which contacts with the conductors, and provides superior electrical contact.

- MC4 compatible
- Pin diameter: 4mm
- Tin plated copper contacts
 IP67 rated

REDEWABLE

坩

- Housing material: PPO
 TUV and UL certified
- Suitable for 4.0mm² solar cable only

		RESERVO DE LA COLOR DE LA COLO
5210	==	

Specifications	
Rated voltage	1000VDC
Rated current	30A
Contact resistance	1 mΩ
Temperature range	-40°C - 125°C



7	Size	Cat.	Qty 1+	Qty 10+	Qty 50+
	Crimp Socket 4mm	PS-5210	\$7.95	\$6.95	\$6.25
	Crimp Plug 4mm	PP-5212	\$7.95	\$6.95	\$6.25

Solar Panel 'Y' Leads

Used for connecting the output of two solar panels in parallel or connecting multiple panels in an array. Waterproof and UV resistant.

• Pin dimension 4mm

• Tin plated copper contacts

- Contact resistance <5m ohm -40° C to $+90^{\circ}$ C
- TUV certified.
- IP67 rated
- Housing material PPO
- Both are 300mm long 2 SOCKETS TO 1 PLUG Generally used on the positive pole of the panel



1 SOCKET Generally used on the negative pole of the panel



7		Cat.	Qty 1+	Qty 10+	Qty 50+
	2 Sockets to 1 Plug	PS-5110	\$19.95	\$17.70	\$15.70
	2 Plugs to 1 Socket	PS-5112	\$19.95	\$17.70	\$15.70

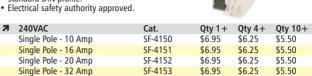
BATTERIES Deep Cycle Gel Cell Batteries and a full range of SLA Batteries on page 335

CIRCUIT PROTECTION FOR PV APPLICATIONS

DIN Rail Mounting AC Circuit Breakers

DIN rail mounted circuit breakers for domestic and commercial switchboards, fuse boxes, distribution boards etc.





240VAC

DIN Rail Mount 2 Pole DC Circuit Breakers

DC circuit breakers, ideal for solar installations, marine, RV etc.

- Rated for 400VDC.
- Standard DIN profile.Electrical safety authority approved.

7	500VDC	Cat.	Qty 1+	Qty 4+	Qty 10+
	2 Pole - 16 Amp	SF-4155	\$24.95	\$22.35	\$19.70
	2 Pole - 20 Δmn	SF-4156	\$24.95	\$22.35	\$19.70

4 Way Lockable IP66 **Circuit Breaker Enclosure**

Designed to take the range of DIN rail circuit breakers. Standard 4-pole ABS enclosure, spring loaded clear front cover with padlock tabs, top, bottom and rear cable entry, DIN rail included, sealed to IP66. Suitable for electrical installations or solar applications.

• Dimensions: 96(W) x 195(H) x 98(D)mm



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	SF-4158	\$34.95	\$31.45	\$27.90

At first glance it may seem simple to choose an appropriate multimeter for a renewable power application. Not really. You must take into account what you will need to check and measure when doing a renewable power installation. We suggest that you may need to ensure that a multimeter has the following characteristics to assist in your task.

• At least 10A D.C. current measuring capability • Data hold

MULTIMETERS & RENEWABLE POWER APPLICATION

• Temperature measurement • Diode test • Audible continuity tone

You will find a great range of meters on pages 151



Ultra High Current Fuses

Littelfuse® patented technology designed for high current protection, found OEM on Ford, GM and Chrysler vehicles. Slo-Blo® feature eliminates nuisance blowing during temporary, short duration overloads. Commonly used for battery and alternator connections and other heavy gauge cables requiring ultra high current protection. SF-1982 and SF-1984 are slow blow fuses; SF-1986 is a short-circuit protection device. Rated up to 32V AC or DC.

Terminal studs 8mm. **Littelfuse** HIGH CURRENT FUSE HOLDER Cat SF-1980

BOLT-DOWN FUSE 125A Cat SF-1982 **BOLT-DOWN FUSE 250A** Cat SF-1984 **BOLT-DOWN FUSE 500A** Cat SF-1986

7		Cat.	Qty 1+	Qty 10+	Qty 25+
	Fuse Holder	SF-1980	\$19.95	\$17.70	\$15.70
	Bolt Down Fuse - 125A	SF-1982	\$9.95	\$8.75	\$7.75
	Bolt Down Fuse - 250A	SF-1984	\$9.95	\$8.75	\$7.75
	Bolt Down Fuse - 500A	SF-1986	\$9.95	\$8.75	\$7.75

Solar Regulator – Chargers

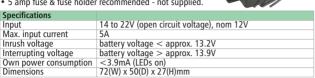
SOLAR REGULATOR & CHARGERS

12V 5A Battery Charging Regulator for Solar Panels

Designed for efficiently charging 12V batteries using solar cells rated up to 5 amps. It is easy to wire-up, prevents battery discharge during low sunlight and indicates charging and full battery conditions using a yellow and green 3mm LED respectively. Ideal for charging 12V SLA batteries from solar panels up to 60-watts.



• 5 amp fuse & fuse holder recommended - not supplied.



7	Cat.	Qty 1+	Qty 2+	Qty 4+
12V 5A	AA-0348	\$29.95	\$26.90	\$23.70

12V 8A Water Resistant PWM Solar Charge Controller

Suitable for both wet-cell and sealed lead-acid batteries and uses pulse width modulation for optimal 3-stage charging. It is compatible with all types of solar arrays and is potted in epoxy resin making it water resistance and suitable for use in areas of high humidity, such as outdoor or mounted to the back of a solar panel. The controller also features a "night light" load output which will automatically connect the load during the evening and disconnect it during the daytime, which also has low-voltage disconnect/re-connect protection. Reverse current flowing through the solar array is automatically blocked in this unit which removes the requirement for a separate blocking diode, and different charge voltages are selectable for wet or sealed type lead-acid batteries. Over current, over voltage, short circuit, over temperature and reverse polarity protections also featured. Full specs available on our website.

Specifications				
Max PV open circuit voltage	26VDC	AARGE CONTROL	and a	
Max PV short circuit current	10A	AARKE		SOIE
Battery voltage	12VDC			
Rated PV input current	8A (10A max)		- ==	
Load voltage	12VDC	a.	-	
Rated load current	8 amps (10A max)	29		
SLA charging voltage	14.5VDC			
Wet cell charging voltage	14.8VDC			
Float voltage	13.8VDC			
Standby current consumption	7mA			
Dimensions	97(L) x 46(W) x 26(H)mm			WARRANTY
7	Cat.	Qty 1+	Qty 2+	Qty 4+
	MP-3720	\$49.95	\$44.90	\$39.90

12V 20A Super Solar Panel Regulator

With a massive 20 amp current handling, this switching solar panel regulator is lightweight, easy to install and does not require a heatsink. It installs easily and features automatic operation, LED power indication and boasts an efficiency up to 99.2% @ 20 amps. Not only does the regulator switch the solar panel in and out depending on the battery voltage, the regulator will disconnect the solar panel after approx 20 minutes at night fall to prevent any losses into the panel overnight. Completely Automatic.

- Battery or solar Power LED indicationSuitable for 1 to 20 amps
- Handles open circuit panel voltages 30 Volts
 Reverse Polarity Protected

	,
Specifications	
Terminals	6.4mm spade lug
Efficiency	97.0% @ 5 amps, 98.5% @
-	10 amps, 99.2% @ 20 amps
Weight	65 grams
Dimensions	66(Ľ) x 51(W) x 34(H)mm

Dimensions	66(Ľ) x 51(W) x 34(H)mm		
7	Cat.	Qty 1+	Qty 2+
12V 20A	MP-31	26 \$79.95	\$75.95

12V - 20A 30A, 24V - 20A Solar Charge Controllers

You make a substantial investment in a solar power setup, so make sure you look after your expensive batteries. With a charge controller, you have total control over battery charging and power usage. The LCD shows the system status and LEDs at a glance

show battery charge status, load status and solar panel connection. They also have features microprocessor control, programmed with 3-stage charging algorithms and pulse width modulation duty cycles of 0 - 100% to provide optimum charge conditions and battery life. 12V and 24V models available.



- User-adjustable charging voltages
 Suitable for wet or sealed lead-acid, lead calcium, lead antimony, Ni-Cd or NiFe batteries
- Microprocessor control PWM (Pulse Width Modulation) for optimum charging 3-stage, bulk, absorption and float charge modes with status on LCD
- Amp-hour logging readouts in 3 sets, today and last 2 days 5-state LED indications of battery levels

- Dusk to dawn automatic on-off with 10 selectable on-off programs
- Adjustable battery low voltage level disconnect and reconnect for DC outputs
- System status display: charge current, battery voltage and capacity
- Overload and short circuit protection
- Over voltage and reverse polarity protection

Three models in this range:



Specification	MP-3129	MP-3722	MP-3724
Rated charge/load current	20A	30A	20A
System voltage	12V	12V	24V
Dimensions	150(W) x 85(D) x 45(H)mm		150(L) x 85(W) x 50(H)mm



7		Cat.	Qty 1+	Qty 2+	Qty 4+
12V	20A	MP-3129	\$149.00	\$133.95	\$118.95
12V	30A	MP-3722	\$179.00	\$160.95	\$142.95
24V	20A	MP-3724	\$179.00	\$160.95	\$142.95

Battery Temperature Sensor for Solar Charge Controllers

Designed to compensate the charging voltage of PV charge controllers and lead acid battery chargers. It's an integrated circuit temperature sensor, sealed in epoxy to a copper sensor lug that connects to the battery terminal. It has a sensing temperature range of -40° to 100°C. The sensor IC has a gain of 10mV/degree Celsius and it is calibrated with the temperature compensation circuit of our PV charge controllers at 25° at the rate of 20mV per degree of temperature change, for example, a temperature increase of 10° will decrease the charging voltage by 200mV, and a decrease of 10° will increase the charging voltage by 200mV.

Suitable for solar charge controllers MP-3129, MP-3722, MP-3724.

Specifications	
Min temperature	-40°C
Max temperature	100°C
Output voltage at 25°C	2.98V
Sensor gain	10mV/°C
Impedance	0.6 ohms
Max forward current	10mA
Max reverse current	15mA



7	Cat.	Qty 1+	Qty 2+	Qty 4+
	MP-3725	\$29.95	\$26.90	\$23.70

12V/24V 30A MPPT Solar Charge Controller

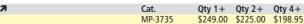
MPPT technology uses DC to DC conversion along with some electronic smarts to be able to extract the absolute maximum charging power from your solar panels, giving you up to an extra 10-40% from your solar panels when compared to a normal PWM charge controller. Adding to the benefits of MPPT technology are the features of this charge controller, such as 3-stage battery charging, twin timer programming, 30A load control with automatic load disconnection/reconnection, and much more. Programming is simple and intuitive via the front panel buttons whilst the LCD screen shows you what's happening. Suitable for 12V or 24V systems.

- Microprocessor controlled MPPT
- 3-stage charging30A automatic load control with low-voltage disconnect/reconnect
- LCD display
- Two timers available for programming
- Includes temperature sensor for battery charging compensation
- Protection against over voltage, reverse connection, short circuit, over current, and over temperature

Specifications	
Max PV array	360W(12V) or 720W(24V)
Battery system voltage	12VDC or 24VDC
Max PV open circuit voltage	65V
Max input current	30A
Rated load current	30A
Ambient temp range	-20°C - 50°C
Efficiency	97%
Dimensions	205(L) x 145(W) x 55(H)mm



NOTE: This unit WILL charge a 12V battery from 24V solar panels, but not vice versa







Solar Regulator – Chargers

SOLAR REGULATORS / CHARGE CONTROLLERS (CONTINUED)

Stackable 12V/24V 40A MPPT Solar Charge Controller

An MPPT, or maximum power point tracker, is an electronic DC to DC converter that An MPP, or maximum power point tracker, is an electronic DC to DC converter that optimises the voltage match between your solar panels, battery bank and load. This results in your panels operating at their optimum power output to get maximum charge current into your battery - providing higher efficiency of up to 97%. What does that mean in real world terms? It means up to an extra 20-40% gain in charging power in summer, when compared to a regular PWM (pulse width modulated) charge controller. The features of this 40A MDPT above controller also allow the new tides are used and extreme with MPPT charge controller also allow for a wide array of applications and systems, with variable battery mode selection and operation modes, as well as low voltage disconnect and reconnect for the connected load output (15A max). To make this unit even more flexible, multiple units can be "stacked" in parallel to increase current capacity. Suitable for 12V or 24V systems.

- Intelligent MPPT technology
 Automatic system voltage detection (12V or 24V)
 Stackable to increase current capacity
 3-stage charging (bulk, absorption, float)

- Reverse polarity, over temperature, over current, overcharge and overload protections Optional battery temperature sensor for charging compensation (MP-3738)
- Low voltage disconnect/reconnect for connected load
- Selectable equalisation charge
- · LED indicators for charge status, operation mode and fault detection

NOTE: This unit cannot charge a 12V battery from a 24V solar panel, or vice-versa Battery bank and solar panels must have the same nominal voltage



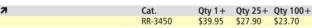
7		Cat.	Qty 1+	Qty 2+	Qty 4+
	Solar Charge Controller	MP-3737	\$299.00	\$269.00	\$239.00
	Battery Temperature Sensor	MP-3738	\$19.95	\$17.70	\$15.70

1.3 Ohm 1kW Dump Load Resistor

Can be used with our MP-3726 or MP-3728 SunStar controllers and a wind turbine generator to provide a high quality diversion load controller. Perfect for use with our MG-4590 500W 24V wind turbine, as an upgrade to the supplied charge

See website for full information





12 - 48V SunStar Solar Linkable Charge Controllers

These professional grade, high current solar charge controllers offer the flexibility to suit almost any solar installation. System voltage can be 12, 24 or 48V, and multiple units can be stacked together (up to 10 units max) allowing your system to grow and expand without rendering your old charge controller useless. Each unit features an LCD and front panel controls, and can be used as either a battery charger, load controller or diversion regulator. They can also be connected to a remote control for remote monitoring, and are fully protected against

reverse polarity, short circuit, high temperature and overvoltage. Particularly suited to the SuperCombi and CombiPlus units, as they communicate via data cables to exchange charging information.

• 45 or 60A models available



Specification	MP-3726	MP-3728
System voltage	12 - 48V	12 - 48V
Max solar voltage	140V	140V
Max operating voltage	68V	68V
PV current	45A	60A

Specifications	
Parallel connection (x 10 units)	Up to 600A
Min. voltage to operate	9V
Power Consumption	25mA while operating, 3mA when idle (inc. LCD)
Operating ambient temp	-40°C - 70°C
Cutout solar	@ 90°C
Cutout load	@ 70°C
Reconnect	solar @ 70°C
Reconnect	load @ 50°C
Humidity	100% non-condensing with conformal
,	coating on both sides of all PCBs
Largest wire	35mm ² /2GA
Enclosure	Type 1, indoor rated
Weight	2kg
Dimensions	266(L) x 127(W) x 75(H)mm

Circuit protection:

- Reverse polarity Short-circuit Over current
- Lightning and transient surge protection, using 4500W transient voltage suppressors
- High temperature protection via automatic current reduction or complete shut down
 Prevents reverse current from battery at night

NOTE: requires data cable (WI-5250, WI-5252, WI-5254) for parallel stacking or connection to SuperCombi/CombiPlus units.

Contact us for more data/specifications

1	Cat.	Qty 1+	Qty 2+	Qty 4+
45 Amp	MP-3726	\$329.00	\$299.00	\$265.00
60 Amp	MP-3728	\$389.00	\$355.00	\$315.00
Remote to suit either Controller	MP-3729	\$129.00	\$115.95	\$102.95

SunStar 50A Advanced MPPT Solar Charge Controller

A true commercial grade MPPT solar charge controller from Rich Electric, with a whole host of features to suit almost any system. Features high grade maximum power point tracking to provide maximum efficiency in converting solar generated power into battery charging. With a wide solar (PV) input voltage range and ability to charge either a 12V, 24V, 36V or 48V battery, this MPPT controller can be used in any number of different system applications. The two auxiliary relay outputs can also be configured to do such tasks as start up a generator with remote start, or control a dump load so that you can also incorporate a start of the property of the system. With the built to be such tasks are such as the system with the power of the system. wind generator into the system. With the ability to parallel stack up to 16 units, they can even be applied to solar arrays up to 50kW! See user manual on website for full features and specifications.

- Continuous output power has NO DE-RATING at up to 50° C ambient temperature Supports flooded lead-acid, GEL, AGM and LiFePO4 batteries

- Full 4-stage battery charging
 Built-in energy monitor tracks power production and consumption to calculate the capacity remaining in the battery (requires external current shunt)
- Built-in backlit 2 line LCD character display Data logs total energy harvested for last 90 days, displaying in Wh, kWh or Ah
- Two programmable auxiliary relay outputs available
- Multiple units can be stacked for large systems (up to 16 units in parallel)

NOTE: Not stocked in stores, and only limited stock kept in warehouse. Check for availability

Specifications		
Max charge current (continuous at 50°C):	50A	
Battery voltage:	12V, 24V, 36V or 48V	
Max PV input current:	40A	
Input voltage range:	16-112VDC operating, 140VDC open circuit	0
Efficiency:	>95%	
DC to DC conversion capability:	12V battery: 16-112VDC, 24V battery: 32-112VDC 36V battery: 48-112VDC, 48V battery: 64-112VDC	
Max PV array:	3250 Watts (max when equalising 48V battery to 65V a	t 50A)
Charging modes:	bulk, absorption, float, auto/manual equalisation	
Battery temp compensation:	5.0mV per °C per 2V of battery	
Standby power:	<2W	
Operating temp:	full output power up to 50°C ambient	
Dimensions:	268(H) x 196(W) x 147(D)mm	
Weight:	4.3kg	



Freecall order hotline: 1800 022 888





Solar Panels – Amorphous

SOLAR PANELS - AMORPHOUS

In the past, amorphous solar panels have been labelled as the cheap alternative for an installation where long service life is not important - however that is about to change. Recent years have seen vast improvements in thin-film solar technology, especially with amorphous silicon based solar panels, and we are now bringing those improvements to you with our updated range of amorphous solar panels. Whilst these panels might look the same as any other amorphous panel, the difference lies within the visual exterior. On top of the features our amorphous panels have always had, they now boast dual-junction amorphous silicon with laser edged isolation construction. What does that mean? It means that along with a small improvement in output efficiency they also have big improvements in the life expectancy of the panel - they will maintain above 80% of their original rated power for 20 years. That's about as good as a polycrystalline or monocrystaline solar panel.

The larger 40W panel (ZM-9034) also features tempered glass panelling, offering the same level of impact protection as our Powertech Monocrystalline solar panels. ZM-9034 is also fitted with an IP65 rated junction box and the output cables are fitted with IP67 rated PV connectors to ensure this model will withstand the harshest of

Beware of cheaper amorphous panels which don't offer these features, as their performance will surely degrade much faster and they will usually perform below their rated specification.

Improved models at no extra cost. Now includes protective plastic corners and battery clips

SO WHY WOULD YOU CHOSE AMORPHOUS PANELS?

Solar Panel Type	Size per Watt	Cost per Watt	Output under cloudy conditions	Power Decrease due to Heat
Amorphous	Bigger (2-3 times)	Cheaper	Yes - and for longer hours each day	-0.19% / °C (less power decrease)
Crystalline	Smaller	More expensive	No - output drops significantly in cloudy conditions	-0.47% / °C

What's the catch?

If you think that amorphous is too good to be true take a close look at their size. The big downside to amorphous is that to get the same power as poly or monocrystalline you need 2-3 times the surface area. This may or may not be a problem. On a yacht, yes, but on a farm probably no.













only

Cat. 7M-9020

Cat. ZM-9024

Cat 7M-9026

Cat. ZM-9034

1 WATT TO 4 WATT PANELS

2W 12V 17.5V 115mA	4W 12V 17.5V 286mA
17.5V	17.5V
115mA	286m∆
	200111/1
150mA	450mA
21V	21V
160 x 313	465 x 313
x 22mm	x 22mm
1.0kg	2.32kg
5 year	5 year
	160 x 313 x 22mm 1.0kg

7	Voltage	Wattage	Cat.	Qty 1+	Qty 2+	Qty 4+
	6V	1W	ZM-9020	\$19.95	\$18.70	\$17.70
	12V	2W	ZM-9024	\$29.95	\$28.45	\$26.90
	12V	4W	ZM-9026	\$49.95	\$47.45	\$44.90

10 WATT TO 40 WATT PANELS

Specification	ZM-9030	ZM-9045	ZM-9034
Maximum power	10W	15W	40W
Rated voltage	12V	12V	12V
Voltage (@ Pmax)	17.5V	17.5V	12V 12U 21.7V 12U PRICE
Current (@Pmax)	572mA	858mA	1.85A
Short circuit current	950mA	1200mA	2.26A
Open circuit voltage	21V	23V	30.9V
Dimensions	923 x 313 x 22mm	973 x 343 x 18mm	1255 x 645 x 40mm
Weight	4.5kg	4.5kg	14.7kg
Warranty	5 year	5 year	20 years

7	Voltage	Wattage	Cat.	Qty 1+	Qty 2+	Qty 4+
	12V	10W	ZM-9030	\$89.95	\$85.50	\$80.95
	12V	15W	ZM-9045	\$129.00	\$122.95	\$115.95
	12V	40W	ZM-9034	\$229.00		

Weatherproof Amorphous Solar Panel - 15 Watt

Keep your batteries charged, or recharge them after powering lights and appliances the night before. It's an amorphous type panel, capable of supplying current up to 1 amp, suited to a wide range of charging applications, and even powering small 12V appliances. The 3.5 metre lead has a plug on the end, to which you can connect the supplied leads. These are 300mm leads to alligator clips, a cigarette lighter plug, and eye terminals. A bright blue LED indicates the panel is working, and the strong ABS frame can be bolted down for mounting.

Measures 950(L) x 340(W) x 18(H)mm.

7	Voltage	Power	Cat.	Qty 1+	Qty 2+	Qty 4+
	12V	15W	ZM-9045	\$129.00	\$122.95	\$115.95

BOOKS ON GREEN POWER

Solar that Really Works

The sun god Ra has been raining down free energy for about 4.5 billion years and only in recent years have humans developed the technology to capture it. This is an informative book that takes a practical look at the do's and don'ts of solar installation from caravans to fishing lodges.

Contained within are detailed descriptions of working solar systems with illustrations. You won't be left asking questions as the author has everything covered

Softcover, 82 pages, Dimensions: 290 x 210mm



BF-1535



\$42.50

Motorhome Electrics

A comprehensive text written primarily for owners, designers and builders of caravans, campervans and motorhomes who face unique power demands and challenges that most auto electricians are ill-equipped to properly address. This book spans the gap between auto electrical and alternative energy disciplines, providing thorough coverage of component definitions and applications, as well as thoughtful and straight-shooting advice on common electrical problems. An engaging read for those with a

general understanding on the subject, it also features more technical in-depth sections to assist trade electricians. Written by acclaimed Australian author and field expert Collyn Rivers, this is an essential reference for all caravan and motorhome enthusiasts

Softcover, 102 pages Dimensions: 300 x 210mm.



Solar Success -**Getting It Right Every Time**

A complete guide for home and remote property systems, this book is about using solar energy to reduce the fossil fuel generated electricity that produces our carbon footprint. Throughout it stresses the need for each of us to reduce unnecessary energy consumption before we think about generating more. This can be done by three associated and economically viable approaches: reduce energy usage by doing things differently, reduce energy usage by using more energy-efficient appliances, and, change the supply of energy

to non-fossil fuel through appropriate technology. A pragmatic no-nonsense approach to solar energy written by acclaimed Australian author Collyn Rivers, who walks the walk by showing his self-installed solar system on his 100% solar powered 10-acre property in the Kimberley. Spiral bound softcover 112 pages



Qty 1+ BE-1537 \$47.50

Caravan & Marine Power Packages

CARAVAN, RV & MARINE POWER PACKAGES

For those who are serious about taking the creature comforts with them whilst touring our fantastic country, or navigating our beautiful oceans and waterways, a serious power system is a must have. Here we have put together a range of power systems that will cater to the varying creature comfort levels and power demands of almost any caravan, RV, motorhome or marine vessel - ranging from a smaller entry level pack to a more serious system that packs a lot of punch.

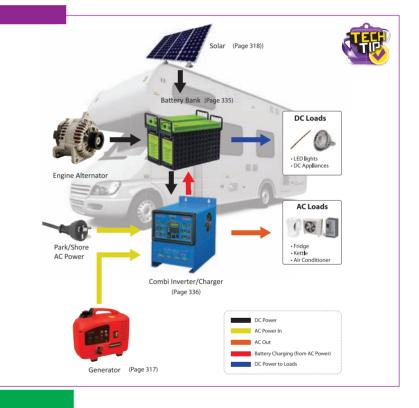


At the heart of these power systems is the fantastic, feature rich Invertek inverter-chargers from Rich Electric - a unit you can rely upon for serious power delivery in even the most extreme conditions. In order to store the power, we have included the industrial grade Amaron Sleek AGM deep cycle batteries, which feature a small footprint and seriously high power density. Of course all the other parts are included to provide solar power and dual battery charging - a complete system to make the most of cruising or touring holidays.



HOW IT WORKS

- 1. Whilst the engine is running, the alternator provides DC charging into the house batteries via the dual battery isolator (or dual battery charging system), giving the bulk of charge whilst you are cruising around
- 2. When camped up or anchored, the solar panels convert sunlight into DC electricity, which is then used to charge the house batteries via the solar charge controller.
- 3. The SuperCombi/CombiPlus inverter-charger converts the stored DC electricity in the house battery to 240VAC electricity to run the appliances.
- 4. When AC park/shore power is plugged in (i.e. when at a powered site/mooring), the SuperCombi/ CombiPlus uses that AC power to both charge the house batteries and deliver power to the AC loads.
- 5. DC appliances and loads can be powered directly from the house battery, with an option for load control (load control on Super- Combi only)
- 6. A 240VAC generator can be incorporated to provide auxiliary power to charge the house battery and power the 240VAC appliances.



STOP PRESS!

12V/24V Battery Monitoring System - 2.8" Touch Screen

MS-6180

In mobile power applications such as caravan, RV, marine, etc, being able to actively monitor the condition of your battery bank is both useful and prudent to ensuring you keep your batteries in top condition. Using state of the art algorithms to measure current (and correct for Peukert's law), this battery monitor accurately measures the state of charge of the battery, giving you not only a battery voltage, but an actual amp-hour capacity or percentage remaining. Simply install the current shunt in line with your battery, and the unit accurately measures what is going into and out of your battery bank, displaying information on the screen accordingly. Additional features include programmable auxiliary outputs, dual battery isolation (external solenoid required), power consumption logging, information screens & alarm functions.

- Full colour TFT display
- Suitable for 12V or 24V battery systems
 Panel mount full colour display

Taner mount run corour alspia)		
Specifications		
Measuring current	+/-500A max	
Supply voltage	4-30VDC	
Current consumption	35-190mA	
Sample rate	3S/s	
Panel cutout	84x54mm	
Dimensions	89(W) x 57(H) x 20(D)mm	
7	Cat.	



Otv 4+

\$249.00

Freecall order hotline: 1800 022 888









POWERTECH

Caravan & Marine Power Packages

CARAVAN, RV & MARINE POWER PACKAGES (CONTINUED)

Caravan/Marine Pack #1.

12V-1500W, 160W Solar, 150Ah Battery

- Approx. 1.3kWh of stored battery power
- Approx. 0.4kWh (35Ah) average daily solar charging

- Most moderately powered household AC appliances
 Kettle, toaster, microwave (but only one at a time)

- Efficient LED lighting
 Efficient AC or DC fridge
- Laptops, DVD players, LCD TV, etc
 CombiPlus 1500W CAN run an efficient 2kW aircon system (but the battery wont last very long)

Cat.

MP-9011

- Includes

 2 x 80W monocrystalline high efficiency solar panels

 12V 150Ah "sleek" deep cycle AGM battery

 Invertek CombiPlus 12V 1500W continuous (3000W max) inverter charger (70A charging)

 Powertech 12V 20A PWM solar charge controller
- Powertech 12V 100A dual battery isolator (adjustable VSR)
 Solar panel connectors and joiners

Watts

1500W

Voltage

12V

Mega fuses

Motorhome/Marine Pack #3. 24V-3000W, 525W Solar, 300Ah Battery

Performance

- Approx. 5.2kWh of stored battery power
- Approx. 1.6kWh (65Ah) average daily solar charging

- Most household AC appliances (preferably efficient)
 Kettle, toaster, microwave (bearing in mind max power output)
- Efficient LED lighting Efficient AC or DC fridge
- Laptops, DVD players, LCD TV, etc
 SuperCombi 300W CAN run an efficient 3kW aircon system, or 6kW inverter type split system (consider battery capacity though)

Watts

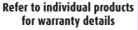
3000W

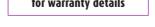
Includes

- 4 x 175W monocrystalline high efficiency solar panels
 4 x 12V 150Ah "sleek" deep cycle AGM batteries
 Invertek SuperCombi 24V 3000W continuous (6000W max) inverter charger (70A charging)
- SunStar 45A PWM solar charge controller
 Invertek 140A dual battery charging system
- CombiNet data leads
- Solar panel connectors and joinersMega fuses

Voltage

Refer to individual products





Cat

MP-9015



Caravan/RV/Marine Pack #2. 12V-1500W, 320W Solar, 300Ah Battery

Performance

Otv 1+

\$3,890.00

for warranty details

- Approx. 2.6kWh of stored battery power
 Approx. 0.8kWh (70Ah) average daily solar charging

- Most moderately powered household AC appliances
- Kettle, toaster, microwave (but only one at a time)
- Efficient LED lighting Efficient AC or DC fridge
- Laptops, DVD players, LCD TV, etc
 SuperCombi CAN run an efficient 2kW aircon system (for a limited amount of time)

- 4 x 80W monocrystalline high efficiency solar panels
 2 x 12V 150Ah "sleek" deep cycle AGM batteries
 Invertek SuperCombi 12V 1500W continuous (3000W max) inverter charger (70A charging)
- SunStar 45A PWM solar charge controller • Invertek 140A dual battery charging system
- CombiNet data leads
- Solar panel connectors and joiners
- Mega fuses

Refer to individual products for warranty details

Voltage Watts Cat. Qty 1+ \$5,540.00 MP-9013





Otv 1-

RECREATIONAL SOLAR PACKAGE DEALS

Clean renewable energy wherever you go. Solar-convert a 4WD or caravan to generate sufficient power to operate several appliances - including a laptop, portable lighting, CB radio and 12-24V camping electricals. Just add a battery or two for a self-sustained solar powered setup.

Four recreational solar package deals to choose from:

Standard Package 80W

Includes:

- 1 x 80W monocrystalline solar panel
- 1 x 12V 6A charge controller
- 2 x female PV connector 2 x male PV connector

Cat 7M-9097 Cat MP-3128 Cat PS-5100 Cat PP-5102

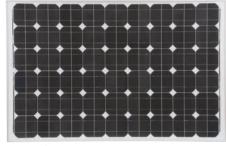






Refer to individual products for warranty details

Qty 1+ \$300.00







Premium Package #1 120W

Includes

- 1 x 120W monocrystalline solar panel
- 1 x 12V 8A PWM charge controller
- 2 x female PV connector
- 2 x male PV connector





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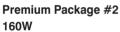
Cat Qty 1+ 7M-9301 \$440.00

Refer to individual products for warranty details

Cat ZM-9098

Cat MP-3720

Cat PS-5100



Includes:

- 3 x male PV connector

2 x 80W monocrystalline solar panel
1 x 12V 20A PWM charge controller
3 x female PV connector Cat ZM-9097 Cat MP-3129 Cat PS-5100 Cat PP-5102 1 x solar panel Y-lead 2 socket to 1 plug
1 x solar panel Y-lead 2 plug to 1 socket Cat PS-5110



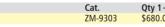




Refer to individual products for warranty details

160W

Qty 1+ \$680.00





Premium Package #3 240W

- 2 x 120W monocrystalline solar panel
 1 x 12V 30A charge controller
- 3 x female PV connector
- 3 x male PV connector
- 1 x solar panel Y-lead 2 socket to 1 plug
- 1 x solar panel Y-lead 2 plug to 1 socket





Refer to individual products for warranty details

ZM-9306 240W \$950.00

Cat PP-5102

Folding Solar Panels

PORTABLE FOLDING SOLAR PANELS

Portable Fold-Up Solar Panel Kits

A convenient alternative energy solution for those on the move. Fold it away and store it in the carry bag when not in use, then when you set up camp just fold it out so your batteries (not included) are being charged. A stand is included so you can position the panel for optimum solar capture. Features alligator clamp connections on a 4m lead, has the charge controller included so you can connect directly to your battery (not included) without fear of over-charging, and is supplied with a durable nylon carry bag. Excellent for camping, 4WD, boating etc.

Specifications	ZM-9132	ZM-9130	ZM-9134
Pmax	40W	80W	120W
Rated voltage	12V	12V	12V
Voltage at pmax	17V	17.3V	18V
Current at pmax	2.35A	4.64A	6.67A
Open circuit voltage	21.5V	21.5V	22.5V
Short circuit current	2.61A	5.1A	7.4A
Weight	5.5kg	10.5kg	13.0kg
Dimensions:			
Open	840(W) x 420(H) x	1090(W) x 623(H) x	1090(W) x 835(H) x
Open	36(D)mm	36(D)mm	36(D)mm
Folded	420(W) x 420(H) x	545(L) x 623(W) x	545(W) x 835(H) x
Tolucu	73(D)mm	73(D)mm	73(D)mm

7	Cat.	Qty 1+	Qty 2+	Qty 4+
40W	ZM-9132	\$279.00	\$269.00	\$255.00
80W	ZM-9130	\$479.00	\$459.00	\$435.00
120W	ZM-9134	\$699.00	\$665.00	\$629.00



Briefcase Amorphous Solar Chargers

Convenient briefcase sized solar chargers for keeping a car battery topped up while on holidays or in storage. Three sizes for small, medium and large cars or 4WDs. Each terminates in a cigarette lighter plug or alligator clips.

12V 2W Charger Cat ZM-9036 **12V 4W Charger** Cat ZM-9037 **12V 7W Charger** Cat ZM-9038



Specifications	ZM-9036	ZM-9037	ZM-9038
Pmax:	2W	4W	7W
Voltage(max)	18V	18V	18V
Current(max)	110mA	220mA	388mA
Dimensions			
Closed	185(L) x 154(W) x 34(H)mm	237(L) x 229(W) x 34(H)mm	335(L) x 250(W) x 36(H)mm
Open	304(L) x 185(W) x 17(H)mm	445(L) x 237(W) x 17(H)mm	492(L) x 335(W) x 18(H)mm

7	Cat.	Qty 1+	Qty 2+	Qty 4+
12V 2 Watt Charger	ZM-9036	\$24.95	\$22.35	\$19.70
12V 4 Watt Charger	ZM-9037	\$34.95	\$31.45	\$27.90
12V 7 Watt Charger	ZM-9038	\$59.95	\$53.95	\$47.90

Otty 4+ \$19.70

MOBILE BATTERY CHARGERS

Waterproof Solar Panels





These solar panels are ideal for charging sealed lead acid batteries. 2 models available. Supplied with mounting brackets, blocking diode, 2m output lead cable with alligator clips. Mounted in a plastic weatherproof case. Also ideal for marine use. They can be mounted on their brackets, and moved to follow the sun, or can be mounted flat on a surface. They are tough, and can be walked on if mounted flat (on a yacht or boat). Ideal for charging batteries in cars used infrequently.

Specifications	ZM-9016	ZM-9018
Wattage	1.26W	4.5W
Voltage (max)	18V	18V
Current (max)	Up to 70mA	Up to 250mA
Panel Dimensions	159(H) x 175(W) x 17(D)mm	187(H) x 255(W) x 17(D)mm

7	Cat.	Qty 1+	Qty 2+	Qty 4+	
1.26W	ZM-9016	\$44.95	\$42.90	\$40.45	
4.5W	ZM-9018	\$99.95	\$94.95	\$89.95	

Smart Solar Battery Charger - 100-120mA 15V



In sunlight, it supplies 15V at around 100-120mA of current. This is enough to keep a 12V battery that is infrequently used topped up. It is ideal for that second car, ride on lawnmower, tractor, boat, etc. It is housed in a plastic case, and has an output lead to cigarette lighter plug, with a LED which illuminates when the solar panel receives a charge.

Note, some cars will require this to be directly wired to the battery, as the cigarette lighter socket is disconnected when the ignition is switched off. Use the car lighter socket to battery clips PP-2007 for cars with switched lighter socket.

• Dimensions: 370(L) x 160(W) x 20(D)mm

7	Cat.	Qty 1+	Qty 2+	Qty 4+
	MB-3501	\$29.95	\$26.90	\$23.70

RENEWABLE ENERGY 坦 JOHER

WIND GENERATORS

Telescopic Vertical Axis Wind Generator 50W

One of the disadvantages of conventional wind generators is that they occupy a lot of space with spinning blades and large poles. A vertical axis generator addresses this by taking up much less real estate, so it can be mounted on a mobile home, caravan or small building. Another advantage is that they are more suitable for areas where the wind direction is variable, as they don't need to be pointed in the wind direction to be effective. The telescopic design means you can fold the generator to half its length when not in use or for high wind speeds, and an LED display give you a readout of output voltage so you know when it's working effectively. Cables, mounting bars and a strong magnetic base are included so this is a complete portable wind generator solution for boating, 4WD, camping, fishing Specifications
Voltage output | 12 - 16VDC
Current output | 4A max

- · Compact design with no spinning blades
- No mounting hardware required
 Not sensitive to wind direction
- · Effective with
- Includes 2m Models not suitable for marine use

b wind and of 0 10m/s	Weight	4.5kg
th wind speed of 8 - 10m/s	Dimensions	455/655(H) x 280(W) x 150(D)mm
cables with alligator clips		

Qty 1+ Qty 2+ Qty 4-MG-4570 \$289.00 \$265.00 \$235.00



WIND TURBINES - 200W, 300W & 500W

Always at the forefront of alternative energy technology, we're pleased to offer a great range of wind turbine generators. As well as the 200W model we have a super-compact 300W version, and a large 500W unit for those who want to generate some serious power. All models feature external charge controllers with three-phase AC output, so you can install a long cable run without worrying about DC voltage drop.

The 200W and 500W units share the same operational and design features, with their 3-phase permanent magnet alternator, external regulator box and simple flat style blades. These two models are perfect for those with a lot of space between themselves and the neighbours, or where a long cable run is needed from the generator to the battery bank. The 500W unit also features slip rings on the generator head to avoid cable breakages.

The compact 300W units are a technological step up from the other two models. They feature moulded, compact, efficient blade design, are lightweight, have neodymium magnets, and like the 200W and 500W units they output 3-phase AC from the generator head to an external charge controller. They also feature slip rings to avoid cable breakage. These 300W units will start spinning at just 2.5m/s wind speed, and will produce their rated power at 12m/s (max power 500W at 15m/s). Available in 12V and 24V outputs, all parts fit into one box weighing just 17kg - making it convenient to transport.

NOTE: All wind generator models are supplied without mounting tower and

associated mounting hardware.

WARNING: These wind generators are suitable for permanent terrestrial installations ONLY! Maximum wind speen 40m/s (144km/h)

200W 12VDC

Cat. MG-4520

• Includes: generator, blades, tail, hub, nose cone, charge controller



300W 12/24VDC Cat. MG-4580 or MG-4582

 Includes generator, blades, tail, hub, nose cone, charge controller



LIEAR WARRANTY

Specifications	MG-4520	MG-4580	MG-4582
Rated Power	200W	300W	300W
Max Power	300W	500W	500W
Output Voltage	12VDC	12VDC	24VDC
Start-up Wind Speed	3m/s	2.5m/s	2.5m/s
Rated Wind Speed	12m/s	12m/s	12m/s
Max Wind Speed	40m/s	40m/s	40m/s
Rotor Diameter	1.7m	1.7m	1.5m
No of Blades	3	3	3
Blade Material	Aluminium alloy	ABS	ABS
Recommended Tower Height	4.5m	6m	6m
Shipping Cartons	Box 1: 700 x 390 x 200, 25kg Box 2: 1300 x 150 x 150, 7.5kg Total Weight = 32.5kg	900 x 400 x 200 Weight 17kg	900 x 400 x 200 Weight 17kg

7	Voltage	Wattage	Cat.	Qty 1+	Qty 2+	Qty 4+
	12VDC	200W	MG-4520	\$499.00	\$449.00	\$399.00
	12VDC	300W	MG-4580	\$699.00	\$629.00	\$559.00
	24VDC	300W	MG-4582	\$699.00	\$629.00	\$559.00

Freecall order hotline: 1800 022 888

Models not suitable for marine use.

Please note different versions of the wind generators require different spare parts. *Please call to confirm which version you have.

SPARE PARTS

Spare Parts	Suits	Cat.	Qty 1+	Qty 2+	Qty 4+
12VDC Control Box	MG-4520v2	MG-4521	\$99.95	\$89.95	\$79.95
12VDC Control Box	MG-4580	MG-4581	\$99.95	\$89.95	\$79.95
24VDC Control Box	MG-4582	MG-4583	\$99.95	\$89.95	\$79.95
Blade Hub	MG-4520v2	MG-4526	\$49.95	\$44.90	\$39.90
Nose Cone	MG-4520	MG-4527	\$14.95	\$13.35	\$11.70
Blade Hub	MG-4530/32	MG-4535	\$39.95	\$35.90	\$31.90
Nose Cone	MG-4530/32	MG-4537	\$14.95	\$13.35	\$11.70
24VDC Control Box	MG-4590	MG-4541	\$129.00	\$115.95	\$102.95
Set of 3 Spare Blades	MG-4530/32	MG-4534	\$79.95	\$71.95	\$63.95
Set of 3 Spare Blades	MG-4520v2	MG-4525	\$69.95	\$62.95	\$55.95

Wind Generator & Alternative Energy

WIND GENERATORS (CONTINUED)

5 Blade Wind Generator 24VDC 500W

This 5-blade wind generator offers many improvements in feature and performance compare to our older 3-blade models. The rotational diameter is significantly reduced, which also gives the added benefits of much lower rotational speed and lower noise levels. Further to that, long-term reliability and safety are improved thanks to the lower rotational speeds. When comparing electrical performance, this new 5-blade wind generator has far greater electrical efficiency - converting more wind energy into electrical energy. In real world terms compared to an equal output rated 3blade wind generator, this unit provides around 60% more annual energy production in low wind areas (avg. wind speeds 5m/s or less). Besides the benefits and features of the 5-blade rotating assembly, this wind generator features 3-phase AC output from the generator head to the external charge controller, with slip rings fitted to eliminate the possibility of cable breakage from rotation. WARNING: Maximum wind speed 40m/s (144km/h)

NOTE: This wind generator is designed for permanent terrestrial installations only! Mounting tower and hardware not included.

Models not suitable for marine use

 Auto brake slows blade rotation when batteries are cha
--

- Marine quality powder coated aluminium body
 All stainless steel hardware, water tight housing
- Iron boron neodymium magnet alternator
- Over-speed protection auto-furling with gravity return Body design flows excess heat into the
- wind reducing operating temperature
- Strong aluminium alloy blades
 Simple to install, easy to use and requires little maintenance

Specifications	MG-4590	
Rated power	500W	
Max power	660W	
Rated voltage	24VDC	
Start wind speed	2 m/s	
Rated wind speed	10 m/s	
Max wind speed	40 m/s	N. O.
Temperature range	-40 to +60°C	7
Rotor diameter	2.15m	
Rotor speed	400RPM	
Blade material	Aluminium alloy	
Recommended	6m	
mounting height		
Generator	3 phase permanent m	agnet alternator
Weight	17kg	
Qty 2+	Qty 4+	
\$855.00	\$759.00	

7	Cat.	Qty 1+	Qty 2+	Qty 4+
24VDC 500W Wind Generator	MG-4590	\$949.00	\$855.00	\$759.00
Spare parts to suit				
5 Spare Blades	MG-4544	\$129.00	\$115.95	\$102.95
5 Blade Hub	MG-4546	\$79.95	\$71.95	\$63.95
Spare Charge Controller	MG-4541	\$129.00	\$115.95	\$102.95
Spare Nose Cone	MG-4549	\$19.95	\$17.70	\$15.70

BOOKS ON ALTERNATIVE ENERGIES

Build Your Own Direct Charging Plant

If you use a Deep Cycle battery to power a remote or mobile home you need an efficient charging plant. This book takes you through all the elements pertaining to building your own Direct Charging Plant including, basic to advanced battery charging, alternators, horsepower vs watts output calculations, power input, efficient regulation and more with full colour pictures and easy to read text.

- 57 pages, softcover
- Dimensions: 254 x 183mm



Cat. BF-1530







An extremely comprehensive coverage of the subject of photovoltaic devices. It covers everything from the characteristics of sunlight to the detailed operation of solar cells and specific purpose photovoltaic applications. Quite technical and detailed, this book is aimed at an engineering level understanding.

Applied Photovoltaics 2nd Edition

- Softcover 313 pages with illustrations.
- Written by experts from the University of New South Wales.





7	Cat.	Qty 1+
	BE-1533	\$55.00

Biodiesel Book

Biodiesel Fuel is a diesel fuel you can easily make yourself at home. With simple methods spelt out in this book, you can produce fuel for a modern day diesel engine from vegetable oil (even used 'fish and chip' oil). Takes you through everything from starting your oil collection service to testing and using your fuel

- 73 Pages, softcover.
- Full colour pictures Dimensions
- 254 x 183mm

600mW





Cat.

BE-1531









Build Your Own Electric Vehicle Book

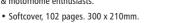
The end of the oil age and inevitable demise of the internal combustion engine will see hybrid and electric vehicles as part of the future. This comprehensive volume will tell you everything you could ever want to know about electric cars: history, evolution, motors, batteries, chassis design, aerodynamics, conversions and more. Hundreds of photos, diagrams, tables, charts and formulas. It also has a resource section with suppliers and further information. Build the ultimate DIY



7	Cat.	Qty 1+
	BM-2442	\$69.95

Motorhome Electrics

A comprehensive text written primarily for owners, designers and builders of caravans, campervans and motorhomes who face unique power demands and challenges that most auto electricians are ill-equipped to properly address. This book spans the gap between auto electrical and alternative energy disciplines, providing thorough coverage of component definitions and applications, as well as thoughtful and straight-shooting advice on common electrical problems. An engaging read for those with a general understanding on the subject, it also features more technical in-depth sections to assist trade electricians. Written by acclaimed Australian author and field expert Collyn Rivers, this is an essential reference for all caravan

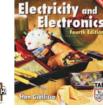




Teach Yourself Electricity and **Electronics - Fourth Edition**

Comprehensive, straightforward and wellwritten, this book covers everything from atomic structure to DC and AC theory, semiconductors, integrated circuits, digital electronics and communications. Each chapter has a quiz at the end so you can test your knowledge of each One of the best entry-level self-teaching textbooks on electronics we've ever seen.

Softcover. 699 pages with illustrations. 232 x 190mm.





7	Cat.	Qty 1+	
	BM-7108	\$59.95	

Sealed lead acid batteries are used generally for two purposes. Standby applications such an emergency power source for safety lights and for security and burglar alarm systems, computer peripheral terminals etc. and cyclic applications as a portable power source for tape recorders, VCRs, toys, lights and use with solar panels for remote power.

The features of these batteries include:

- leak proof construction
- long service life
- usable and rechargeable in any position by high discharge rate capability wide operating temperature range

3.74A (18.7Ah)

6.16A (30.8Ah)

32.4A (162Ah)

16.2A (81Ah)

32 4A (1627h)

deep discharge recovery
 designed not to discharge hydrogen into the atmosphere.

Charge voltage for 12 volt is 13.5 to 14.7 volts and for 6 volt is 6.8 to 7.4V volts.

1.3A (26Ah)

1.94A (38.8Ah)

10.4A (208Ah)

5.1A (102Ah)

2.11A (21.1Ah)

3.8A (38Ah)

20A (200Ah)

10A (100Ah)

The charging time must be doubled if the charge current is halved.									
Cat.	Capacity	20hr rate	10hr rate	5hr rate	1hr rate	Initial Charge Current	Cycle Voltage	Standby Voltage	Page
SB-2495	6V 1.3Ah	65mA (1.3Ah)	117mA (1.17Ah)	208mA (1.04Ah)	780mA (0.78Ah)	<0.39A	7.20-7.50V	6.75-6.90V	330
SB-2496	6V 4.2Ah	210mA (4.2Ah)	378mA (3.7Ah)	672mA (3.36Ah)	2.25A (2.25Ah)	<1.2A	7.20-7.50V	6.75-6.90V	330
SB-2498	6V 5Ah	250mA (5.0Ah)	450mA (4.5Ah)	800mA (4Ah)	3.0A (3.0Ah)	<1.5A ¹	7.20-7.50V	6.75-6.90V	330
SB-2497	6V 12Ah	600mA (12Ah)	1.08A (10.8Ah)	1.92A (9.6Ah)	7.2A (7.2Ah)	<3.6A	7.20-7.50V	6.75-6.90V	330
SB-2480	12V 1.3Ah	65mA (1.30Ah)	117mA (1.17Ah)	208mA (1.04Ah)	780mA (0.78Ah)	<0.39A	14.4-15.0V	13.5-13.8V	330
SB-2482	12V 2.2Ah	110mA (2.2Ah)	198mA (1.98Ah)	352mA (1.76Ah)	1.32A (1.32Ah)	<0.66A	14.4-15.0V	13.5-13.8V	330
SB-2484	12V 4.2Ah	200mA (4.2Ah)	380mA (3.8Ah)	680mA (3.4Ah)	2.40A (2.4Ah)	<1.2A	14.4-15.0V	13.5-13.8V	330
SB-2485	12V 6Ah	300mA (6Ah)	486mA (4.86Ah)	864mA (4.32Ah)	3.24A (3.24Ah)	<1.62A	14.4-15.0V	13.5 - 13.9V	331
SB-2486	12V 7.2Ah	360mA (7.2Ah)	650mA (6.5Ah)	1.15A (5.75Ah)	4.32A (4.32Ah)	<2.1A	14.4-15.0V	13.5-13.8V	331
SB-2487	12V 9Ah	450mA (9Ah)	810mA (8.1Ah)	1.44A (7.2Ah)	5.4A (5.4Ah)	<2.7A	14.4-15.0V	13.5 - 13.9V	331
SB-2489	12V 12Ah	600mA (12Ah)	1.08A (10.8Ah)	1.92A (9.6Ah)	7.2A (7.2Ah)	<3.6A	14.4-15.0V	13.5 - 13.9V	331
SB-2490	12V 18Ah	900mA (18Ah)	1.72A (17.2Ah)	3.05A (15.2Ah)	10.8A (10.8Ah)	<3.4A	14.4-15.0V	13.5 - 13.9V	331

12V 200Ah SB-1697 10.8A (216Ah) Note 1: Current is limited by spring terminal type

6 VOLT SLA BATTERIES

12V 26Ah

12V 38Ah

2V 200Ah

12V 100Ah

1.3 Amp Hour 6 Volt

- Dimensions: 97 (L) x 51 (D) x 21(H)mm
- Spare SLA battery
- See table for specifications



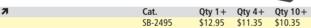
SB-1698

SB-1699

SB-1696

SB-1695

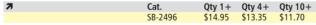
POWER & RENEWABLE ENERGY



4.5 Amp Hour 6 Volt

- Dimensions: 70(L) x 47(D) x 106(H)mm
- See table for specifications



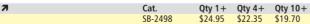


5.0 Amp Hour 6 Volt Lantern Battery

This 6 volt 5Ahr rechargeable sealed lead acid battery suits those popular Dolphin style torches.

- Dimensions: 67(L) x 67(D) x 97(H)mm
- · See table for specifications





12 Amp Hour 6 Volt

- Dimensions: 151(L) x 51(D) x 100(H)mm
- See table for specifications





7	Cat.	Qty 1+	Qty 4+	Qty 10+
	SB-2497	\$29.95	\$26.90	\$23.70

12 VOLT SLA BATTERIES

<7.8A

<12A

<60A

<30A

< 30A

1.3 Amp Hour 12 Volt

- Dimensions: 97(L) x 43(D) x 57(H)mm
- See table for specifications



14A (14Ah)

22.3A (22.3Ah)

117A (117Ah)

58.5A (58.5Ah)

117 (117Ah)



14.4-15.0V

14 4-15 0\

2.4-2.5V

14.4-15V

14 4-15V

TECH TIP

See our website

for discharge

characteristics

13.5 - 13.9V

2.25 - 2.3V

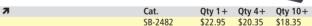
13.5 - 13.8V

13 5-13 8V

2.2 Amp Hour 12 Volt

- Dimensions: 178(L) x 34(D) x 66(H)mm
- See table for specifications

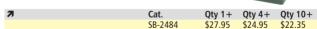




4.2 Amp Hour 12 Volt

- Dimensions: 90(L) x 70(D) x 106(H)mm
- · See table for specifications





TECH TIP

Battery Maintenance Periodic visual inspection of the battery is recommended.



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If the battery is stored for over six months, it is recommended to charge and discharge the battery several times to resume the battery capacity, failure to do so may result in a loss of capacity and shorter battery life.

Bear in mind that self-discharge has to be taken into consideration when storing a charged battery. The remaining battery capacity should be at least 50% after a month of storage at room temperature for a fully charged battery. High storage temperatures will accelerate the self-discharge, and reduce the remaining capacity.

SLA Batteries & Chargers

12 VOLT SLA BATTERIES (CONTINUED)

6.0 Amp Hour 12 Volt

Dimensions: 150(L) x 65(W) x 93(H)mm

• See table for specifications



Excellent for Home **Alarm Systems**



Qty 10+ SB-2485 \$24.95 \$22.35 \$19.70

7.2 Amp Hour 12 Volt

- Dimensions: 150(L) x 65(D) x 93(H)mm
- See table for specifications



Excellent for Home Alarm Systems



Qty 4+ Qty 10+ SB-2486 \$29.95 \$26.90

9.0 Amp Hour 12 Volt

- Dimensions: 150(L) x 65(W) x 93(H)mm
- See table for specifications

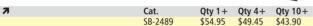




12.0 Amp Hour 12 Volt

- Dimensions: 150(L) x 100(W) x 93(H)mm
- See table for specifications



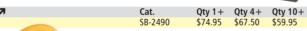


18.0 Amp Hour 12 Volt

- Dimensions: 181(L) x 77(D) x 167(H)mm
- See table for specifications



Nuts & Bolts Supplied





Alessandro Volta (1745 - 1827)

He invented the practical battery using cells of two types of metals. Volta also studied what we now call electrical capacitance, developing separate means to study both electrical potential (V) and charge (Q), and discovering that for a given object, they are proportional.

This may be called Volta's Law of capacitance, and likely for this work the unit of electrical potential has been named the volt.

SLA Battery Carry Bag

Designed for carrying a large sealed lead-acid battery. Suits sealed lead-acid batteries 12V 7.2Ah (SB-2486) or 6V 12AH (SB-2497) - (and Panasonic equivalents) approx. max. size 151 x 65 x 101mm. Features fused cigarettelighter socket (10A), zip-up cover, and internal fold-away protective flap. Battery can be medium/slow charged INSIDÉ THE BAGI



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	HB-6360	\$19.95	\$17.70	\$15.70

SLA BATTERY CHARGERS

6V 500mA & 12V 350mA

These are 240V plug in power packs for charging lead-acid batteries. They are fully automatic, in as much as they switch to trickle charge automatically when the battery is charged. This way you don't have to remember to switch them off after so many hours. The charging indicator (LED) will flash to show that the unit is operating in trickle charge state. This advanced charger delivers 100% full charge to the battery. Both have spade clips on the output to clip onto battery terminals, and are Energy Authority approved.



7		Approval Number	Cat.	Qty 1+	Qty 2+	Qty 4+
	6V 500mA	N17982	MB-3516	\$19.95	\$17.70	\$15.70
	12V 350mA	N17982	MB-3517	\$19.95	\$17.70	\$15.70

2. 6 & 12V 600mA

This fully automatic charger will charge 2V, 6V, and 12V sealed, and standard (car) lead-acid batteries. When the battery is completely charged, the current is automatically reduced to prevent overcharging.

- 600mA charging current
- Short circuit and wrong polarity protected
- Constant charging current
- No charge if battery connected incorrectly
 LED's show charging state

Output lead has battery clips for easy charging. Ideal to trickle charge your car battery while on holidays or keep those SLA batteries charged and

in tip top condition.

7	Approval Number	Cat.	Qty 1+	Qty 2+	Qty 4+
	N19029	MB-3518	\$24.95	\$22.35	\$19.70

This SLA charger is fully automatic. When the battery is charged, the charger automatically switches to trickle charge and a green LED will show this. Virtually any SLA battery can be charged but the higher the battery size, the longer the charge.

- · Short circuit and wrong polarity prevention
 Constant charging current
- No charge with wrong polarity connection
- No voltage at alligator clips until battery is connected.

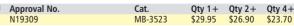
 • Will not charge a totally flat battery i.e.
- zero volts.
 Energy Authority Approved.

7	Approval No.	Cat.	Qty 1+	Qty 2+	Qty 4+
12V 1A	N19029	MB-3526	\$24.95	\$22.35	\$19.70

6V & 12V 1.8A

This 1.8 Amp charger includes a built in polyswitch for over current and polarity protection. Includes a LED for power on indication. Virtually any SLA battery can be charged, though the higher the capacity, the longer the charge time. Supplied with a 2.1mm DC plug and a lead with battery clips.

- 6V or 12V charging Short circuit protection
- Reverse polarity protection Note: Will not charge a totally flat battery i.e. zero volts.





See page 201 for our new low cost Heavy Duty Lug Crimping Tool





6V & 12V, 8A Heavy Duty with Trickle Charge

This charger is suitable for both 6 and 12 volt car, boat, motorcycle and lawnmower batteries. Featuring 4-stage LED charge indicators, the charger can be switched between trickle or heavy duty charge rates and is recommended for casual, domestic charging tasks. The unit is housed inside a tough plastic case with carry handle, is double insulated and features overload and reverse battery protection. The battery leads are terminated to heavy duty alligator clips on a 1 metre length of cable.

• Complies with Australian Electrical Safety Regulations



12/48V 70A

Cat MB-3522

Qty 1+ **Qty 4+** \$47.90 Qty 2+ \$53.95 \$59.95

Intelligent 6V/12V/24V 15A Battery Charger

An intelligent battery charger suitable for flooded and gel lead acid batteries including deep cycle batteries at 6V, 12V or 24V. The microprocessor controlled unit provides 4 stages of charging, Soft Start, Bulk Charge, Absorption and Float which assists in the batteries life expectancy and

Colour may

vary to one shown

LJEFIR)

performance. An auto detection feature provides a user friendly experience, which can be pre-programmed or manually set for greater control. Should a blackout occur or AC input power be lost during a charging operation the memory function will resume charging once power is re-established. Other features include temperature/voltage compensation, reverse polarity/short circuit protection and a battery status indicator. Ideal for cars, motorcycles, caravans and boats with battery capacities between 20-400Ah. It's also ultraportable with a handy storage pocket in the back for the leads

· Memory function

Temperature controlled fan

LED battery status displayTemperature and voltage

compensation

Protection:

RENEWABLE ENERGY

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DOMER

- Anti spark · Short circuit
- Reverse polarity
- Over heating/current/voltage

3.	. 3
Specifications	
Input	220 - 240VAC, 300W
Output	15A @ 12V
	7A @12V/24V
	2A @ 6V/12V/24V
Dimensions	230(H) x 170(W) x 140(D)mm

Qty 2+ Qty 4+ MB-3623 \$149.00 \$133.95 \$118.95

12V / USB E-Charger / Power Bank

This unit is designed for use on 12V vehicles with a weak starter battery. The power bank's 600mm lead plugs into the automotive cigarette lighter socket and will take approximately 15 minutes to deliver sufficient power to start the vehicle. With a USB and a female automotive accessory socket, this unit also services as a back-up device for other equipment such as mobile phones, PDA and iPods®

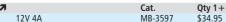


Freecall order hotline: 1800 022 888

• This device will not work with a heavily discharged or sulphated automotive battery

• Terminates to a 15A fused male automotive cigarette lighter plug for charging

Specifications	
Internal battery	12V 4 amp SLA
Accessory output power	12VDC @ 5 amp max
USB output power	5VDC @ 500mA max
Power	240VAC mains charger supplied
Unit measures	250(W) x 110(L) x 80(H)mm



5-in-1 Jump Starter-Inverter-**Charger-Compressor-Work Light**

Far more than your average jump starter, this unit has an impressive set of features for a hundred different uses. Tucked in on either side are two tough insulated battery clamps for all your jump starting needs, on the front panel you have 2 x 12VDC cigarette lighter sockets for operating hundreds of 12V appliances, a 5 x LED powered work light and two dial indicators for air pressure and charge status. One of the most useful additions to this unit is the 260PSI air compressor. We've all had a flat tyre, and if you haven't it might happen tomorrow! The air compressor is fitted to a 600mm tube with tyre valve stem adaptor and the pressure is indicated in kg/cm and Lb/in. The 400W inverter gives you a 240VAC mains style outlet at the rear for plugging in

to charge your laptop or other devices. Powered by an internal 12V 18Ah SLA battery. Black rubber handle and corners will protect against common knocks and accidental drops.

THOUSANDS &

THOUSANDS SOLD

Supplied with alligator clips

MB-3612

160W

850g

12A / 6A +/- 5%

14.4V +/- 0.1V 13.8V +/- 0.1V 0~50° C

162 x 96 x 48mm

· Air compressor for pumping tyres and other inflatables

AC and DC chargers included

12V 18Ah SLA battery inside • 400W (800W surge) Inverter - 240VAC outlet

at rear for powering laptops, etc 5 LED work/map light at front panel

- Charging and air compression dial indicators 2 x 12VDC sockets for running 12V appliances
- DC charging takes approximately 12 hours
- AC charging takes approximately 34 hours Charging jack
- Built in air cooling fan
 Battery level indicator
- 1000A Peak, 500A Cranking
 Dimensions: 220(L) x 215(W) x 295(H)mm

Qty 1+ Qty 2+ Qty 4+ \$149.00 \$133.95 \$118.95 Cat. MB-3594

12V 12A Switchmode Dual Stage Float Charger

This fully automatic charger uses switchmode technology to batteries. Simply plug it onto the battery and forget - the battery will fast charge, then automatically switch to float (trickle) charge when full. It is housed in a robust metal frame, is powered from 240V, features fan cooling, and includes 700mm flyleads with heavy duty battery clips.

It features a power indicator LED and power switch, as well as a switch to select between full or half current for when you are charging batteries of a small capacity. It also includes a 5 segment LED bargraph to indicate the charge

Protected for output short circuit, polarity inversion, over-temperature and overload.

- Supplied with a mains lead.
- Suits sealed or un-sealed lead-acid batteries
 Compact, reliable and fully automatic
- Uses advanced MOSFET technology
- Over 85% efficiency

LIEFR
WARRANTY

LERR							>85%	
- l	ARRANTU			AC inp	out: 220VAC	switchable	47~63Hz	
7		Amps	Approval No	Cat.	Qty 1+	Qty 2+	Qty 4+	
	12V	12A	Q050859	MB-3612	\$99.95	\$89.95	\$79.95	

Specifications Voltage:

Max. current:

Equaliser charge:

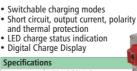
Floating charge: Operating ambient

Dimensions WxHxD: Weight:

Wattage:

48V 9A 3 Stage Battery Charger

Suitable for golf buggies, electric wheelchairs or similar applications. It monitors and manages your charging with three different stages and will maintain the optimum charge level. Compact and lightweight. Includes output cables with eye terminals to attach to your battery.



Specifications				
Input	190 - 260VAC	-8		
Output	48VDC @ 9A max			
Dimensions	298(L) x 112(W) x 60(H)	mm		

48V 9A MB-3628 \$299.00



Multi-Stage Battery Chargers

MULTI STATE BATTERY CHARGERS

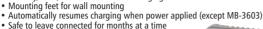
Switchmode

High tech SLA battery chargers for automotive, marine, motorcycle, workshop or industrial use. All feature switchmode operation, multi-stage maintenance and charging, near-bulletproof performance and microprocessor control. All are IP rated for use in workshops and hostile environments.

- 3 year warranty Short circuit and reverse polarity protection

- Anti-spark protection
 Dust & splash proof (IP rated)
 Standby, fault, mode selection and charging LED indicators

· Safe to leave connected for months at a time



6/12V 3-State

3-stage set-and-forget maintenance charger.
Automatically diagnoses, recovers and recharges 6 or 12 volt lead-acid, gel, and AGM rechargeable batteries for boats, motorcycles etc. Maintains your battery for months and extends battery life by constantly monitoring battery condition and bulk, trickle or maintenance charges accordingly. Handy storage hooks for alligator clips keep the lead out of the way when not in use



12V 3.8A 5-State

Three different modes of operation make this charger suitable for all types of SLA batteries - wet cell, gel cell, and AGM, ranging in capacity from 1.2Ah to 120Ah. The microprocessor controlled circuitry will diagnose the battery's state of charge, provide the correct charging mode, eventually switching over to float/maintenance charge to keep the



battery at full charge and eliminate battery sulphation. This charger can also recover sulphated batteries as low as 3.5V, and charge batteries in sub-zero temperatures. The interchangeable lead sets allows a charging lead to be permanently attached to your battery for quick connection/disconnection of the charger - a must have for motorbikes with hard to reach battery terminals or that classic car that spends most its life in the garage! 100% safe to leave connected to your vehicle's battery for months.

- 3 different charging modes:

 Mode 1: 14.4V / 0.8A, for motorcycle batteries

 Mode 2: 14.4V / 3.8A, for car batteries

 Mode 3: 14.7V / 3.8A, for AGM batteries and sub-zero temperatures
- IP65 Rated
- Dimensions: 175(L) x 60(D) x 45(H)mm

7		Cat.	Qty 1+	Qty 2+	Qty 4+
	6/12V 750mA	MB-3603	\$49.95	\$44.90	\$39.90
	12V 3.8A	MB-3604	\$79.95	\$71.95	\$63.95

BATTERY DISCONNECTS & ACCESSORIES

Battery Isolation Switches

High current rated battery isolation switches for high power applications. Often fitted to boats, trucks, motor homes and other battery based power systems to allow for quick and easy electrical isolation of the battery for protection against discharge, fire and other safety risks. Each switch features high quality construction with large bolt-down terminals for electrical connection.

HIGH QUALITY 120A

- Large removable key actuator
 Continuous rating: 120A @ 12V
 Surge rating; 500A, 60mm diameter mounting plate

PROFESSIONAL 500A

The switch handle features a tight and secure spring loaded actuation, locking the switch into the ON position and requiring you to pull the handle out to turn it off, avoiding accidental battery isolation. Features heavy gauge M12 brass bolt terminals, cast metal body for extra strength and durability, and is also supplied with a right angle mounting bracket.



71	Cat.	Qty 1+	Qty 4+	Qty 10+
12V 120A	SF-2245	\$17.95	\$15.95	\$14.35
12V 500A NEW	SF-2247	\$49.95	\$44.90	\$39.90

12V-7.0A/24V-3.5A 7-State

The bigger brother of MB-3604, this is a 5stage full maintenance charger for 12 and 24V lead-acid SLA, gel and AGM batteries with bonus features. Fully automatic charging modes with diagnostic and recovery features, it also features a power supply mode where it can act as a 13.6VDC 5A power supply. Unrivalled versatility, offers six different modes of operation:



- 14.4V/7A Charge for 12V lead acid batteries
 14.7V/7A Charge for 12V AGM batteries
 28.8V/3.5A Charge for 24V lead acid batterie
 29.4V/3.5A Charge for 24V AGM
 Sp
- hatteries
- 16V/1.5A BOOST to recover severely discharged 12V batteries
 • 13.6V/5A Power Supply
- Interchangeable lead set (alligator clips and ring terminal leads included) Overload, short circuit, open circuit,
- anti-spark and reverse polarity protected Suitable for 12 and 24V batteries (automatic detection)

teries	
Specifications:	
Input voltage	220 - 240VAC
Output voltage	14.4, 14.7V, 28.8V, 29.4V, 16V, or 13.6VDC
Input current	400mA max
Charging current	12V-7A, 28V-3.5A
Efficiency	>75%
Ripple	150mV, 300mA max
Back current drain	<5mA
Rating	IP65 Rated
Dimensions	200(L) x 85(W) x 50(H)mm

12V-25.0A/24V-12.5A 9-State

Nine step fully automatic 25 amp high current charger with maintenance charging of all types of lead-acid batteries (SLA, Gel and AGM) as well as lead-calcium batteries from 50 - 500Ah, either 12V or 24V. The electronics are fully microprocessor controlled and protected against user error, so is totally safe to leave connected for months at a time. This charger will also charge in sub-zero temperatures, will recover sulphated batteries and can be used as a 5A power supply.

Also features "boost" modes to recover deeply discharged batteries. The battery output lead has a temperature sensor to automatically compensate charging voltage



Specifications:	
Input voltage	170 - 260VAC
Output voltage	12 or 24VDC
Input current	4A max
Charging current	12V-7A, 28V-3.5A
Efficiency	>75%
Ripple	150mV, 300mA max
Back current drain	<5mA
Rating	IP44 Rated
Dimensions	260(L) x 135(W) x 70(H)mm

Perfect for boats, caravans & motorhomes

See our website to download full product info sheet



Note: Battery

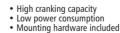
not included

7		Cat.	Qty 1+	Qty 2+	Qty 4+
12/24V	7A / 3.5A	MB-3606	\$149.00	\$133.95	\$118.95
12/24V	25A/12.5A	MB-3608	\$399.00	\$359.00	\$319.00

Low Voltage Battery Isolator

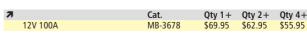
With microprocessor control, this indispensable device monitors the output voltage of any 12V lead-acid battery. If the terminal voltage drops below 11.9V, the battery will be automatically disconnected to prevent deep-cycle damage and finding a dead battery when you go to start your vehicle. Very easy to install, it can be mounted on

the top or beside the battery and can be manually overridden if required. Essential for boats, camping, caravans, RVs, 4WD, solar power systems or any application that has either dual battery setup or single battery with accessories being run.



Specifications	
Supply voltage	12VDC
Power consumption (standby)	15mA
Rated input/output current	100A
Cranking current	350A
Operating temperature range	-25 - 125°C
Dimensions	85(H) x 55(W) x 35(D)mn

7	Cat.	Qty 1+	Qty 2+	Qty 4+
12V 100A	MR-3678	\$69.95	\$62.95	\$55.95



Battery Disconnects & Accessories

BATTERY DISCONNECTS & ACCESSORIES (CONTINUED)

Dual Battery Isolators with Adjustable Disconnect/Reconnect

For any 4WD, caravan, campervan or motor home enthusiast, a dual battery system is an almost "must have" addition. In order to protect your start battery from being drained by these extra loads, you need to install a dual battery isolator such as one of these. These solid-state dual battery isolators work by using high power FETs and MCU controls to automatically connect and disconnect the auxiliary battery to your start battery. The idea being that the isolator allows both batteries to be connected and charged by the alternator whilst driving. The isolator will keep the two batteries connected until the voltage of the start battery is reduced to the cut-out voltage, at which time it will disconnect to ensure that sufficient charge is kept in your start battery

to be able to start your engine again. To avoid erroneous cut-in/cut-out "stutter", the unit employs a 15 second delay on the disconnect/reconnect function, ensuring that if a discharged auxiliary battery is connected it does not cause the isolator to immediately disconnect, then immediately reconnect again, then disconnect, etc - which would stop the auxiliary battery from ever being charged. Just in case you do end up with a flat start battery, there is a manual override to connect both batteries and boost the power to start your vehicle. Cut-in and cut-out voltages are independently adjustable with 10 set-points each, and LED indicators let you know what's happening. Two models available: MB-3680 for 12V batteries, and MB-3682 for 24V batteries.

- MCU controls with FET switching, 100% solid state technology with extremely low standby current and voltage drop 10 user adjustable set points for
- disconnect and reconnect voltages
- Over current, over voltage and over temperature protection
- Emergency over-ride feature Can be used independently as a low voltage disconnect/reconnect for a 100A load

Specifications:	MB-3680	MB-3682	
Low voltage protection (no delay)	8.5VDC +/-0.5VDC	17VDC +/-1VDC	
Over voltage protection	18.5VDC +/-0.5VDC	32VDC +/-1VDC	2040
Over current protection	150A	150A	1
Continuous current	100A	100A	1000
Standby power draw	5mA (LED off)/9mA	5mA (LED off)/9mA	
Standby power draw	(LED on)	(LED on)	
Voltage drop at max load	250mV	250mV	
Operating temp. range	-40°C - 60°C	-40°C - 60°C	The state of the s
Dimensions	195(L)x75(W)x50(H)mm	162(L)x75(W)x50(H)mm	10

	Note. 249 model not stocked at all stoles call illst.					
7	Cat.	Qty 1+	Qty 4+	Qty 10+		
12V	MB-3680	\$119.00	\$106.95	\$94.95		
24V	MB-3682	\$119.00	\$106.95	\$94.95		

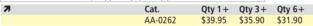
Battery Testers and other Auto Testers see page 442 and Battery Clips see page 428.

Battery Discharge Protector

Protects your car battery from total discharge by switching off appliances such as fridges and TV sets before the battery voltage drops to an unrecoverable level. When battery voltage is re-established by recharging, it switches appliances on automatically. The

interrupting voltage is adjustable from 10.4.to 13.3VDC Essential low-cost insurance if you have a dual battery setup in a boat, 4WD, RV or for an alternative energy system such as solar or wind power.

Specifications	
Operating voltage	12VDC
Max. switching current	20A
Interrupting voltage	10.4 - 13.3VDC
Resetting voltage	approx. 0.8V (+/-0.3V) above interrupt voltage
Current consumption	< 0.7mA when OFF, < 1.6mA when ON
Dimensions	87(I) x 60(W) x 32(H)mm



Digital DC Power Meters

An ideal addition to any low voltage DC system this digital power meter features real time display of the voltage, current draw, and power consumption. Once running it also stores minimum and maximum voltage, current, and power, together with cumulative amp hours and watt hours consumed by the connected equipment. Suitable for DC systems from 5 to 60 volts and available in versions suitable for inline connection or remote connection with a separate current shunt. Mount the meter using the included snap-in bracket or magnetically on any ferrous surface.

- Dimensions: 41(L) x 45(W) x 23(D)mm
- Operating current: 12mA peak

Measurement Specifications:

- Voltage Range: 5-60VDC (0-60VDC with external DC power source)
- Wattage Range: 0-3600W

Logging Specifications:

- Cycle Time: 15 minutes
- Maximum Amp Hours: 99,999Ah
 Maximum Kilowatt Hours: 9,999.9kWh
- Maximum Cumulative Log Time: 225 hours

Two models available:

DIGITAL DC POWER METER WITH INTERNAL SHUNT

• Continuous Current Range: 0-20A

• Peak Current: 30A for 30 minutes MS-6170

See page 172 for Shunts

DIGITAL DC POWER METER TO SUIT 50MV EXTERNAL SHUNT

Current Range: 0-200A depending on shunt

Suitable DC shunts sold separately

MS-6172

IVIJ	0172				
7	Current Range	Cat.	Qty 1+	Qty 4+	Qty 10+
	0 - 20A	MS-6170	\$69.95	\$62.95	\$55.95
	0 - 200A	MS-6172	\$74.95	\$67.50	\$59.95

12V/24V Battery Monitoring System - 2.8" Touch Screen In mobile power applications such as caravan, RV, marine, etc, being able to actively monitor the condition of your battery bank is both useful and prudent to ensuring you keep your batteries in top condition. Using state of the art algorithms to measure current (and correct for Peukert's law), this battery monitor accurately measures the state of charge of the battery, giving you not only a battery voltage, but an actual amp-hour capacity

the unit accurately measures what is going into and out of your battery bank, displaying information on the screen accordingly. Additional features include programmable auxiliary outputs, dual battery isolation (external solenoid required), power consumption logging, information screens & alarm functions

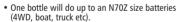
- or percentage remaining. Simply install the current shunt in line with your battery, and
- · Full colour TFT display
- Panel mount full colour display
 Supply voltage: 4-30VDC
- Sample rate: 3S/s
- Suitable for 12V or 24V battery systems
- Measuring current: +/-500A max
 Current consumption: 35-190mA
- Panel cutout: 84x54mm

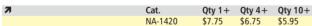


 Dimensions: 89(W) x 57(H) x 20(D) 	mm			WARRANTS
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	MS-6180	\$249.00	\$225.00	\$198.95

Lead-acid Battery Conditioner

Removes or reduces sulphation which kills batteries. We Removes or reduces sulphation which kills batteries. We have been looking at this product for about 5 years now. Frankly, we were sceptical. A product in a bottle that brings sulphated car batteries back to life? Well, fact is, it does work. As many of you know, when wet-cell lead-acid batteries are allowed to sit around they will sulphate up in as short a time as 6 months. The sulphate builds up on the plates and separators. This product basically dissolves the extend the warranty on a new battery by a year if used when the battery is new.





Lead-acid Battery Desulphator (Zapper)

When stored for prolonged periods or irregularly cycled, all lead-acid batteries are prone to a lead sulphide build-up on their plates. This is not a problem if the battery is regularly recharged as the lead sulphate turns back to sulphuric acid. If left, the sulphate can precipitate to the bottom of the battery or harden, making the reverse process difficult. The MB-3660 delivers a fast rise time pulse to the battery which is often successful in reversing this damage and restoring the capacity of the battery. Will not, however, do a "Lazarus" on badly damaged batteries!

Specifications: Battery Voltage 12V Start-Up Voltage 12.8V +/- 0.2V Cut-Off Voltage <12.6V +/- 0.2V



Freecall order hotline: 1800 022 888

MB-3660 \$49.95 \$44.90 \$39.90

Battery Banks & Deep Cycle Batteries

DEEP-CYCLE GEL CELL BATTERIES

Deep Cycle Batteries

These add genuine deep-cycle batteries to our already substantial range of batteries. As with all gel cells, they can be operated and charged in any position, are leakproof and completely sealed. Gel batteries are ideal for solar power, camping, 4WD, auxiliary applications and anywhere deep discharge and recovery is required.

SB-1695 12V 100AH







CD 1606



CR-1600

	AND THE PERSON			//	\ \		35 1030	35 1030	
	- B	題)		₩.	E 820 B	Terminal voltage	2V	12V	
	an Pb.	Inde-		EM.	S O FINE	Nominal capacity	20 hour rate 200Ah	20 hour rate 26Ah	
					CD 4507 12V 200AU	Capacity at 0°C	85%	85%	
				4	SB-1697 12V 200AH	Self discharge	9% after 3 months (residual capacity 91%)	9% after 3 months (residual capacity 91%)	
Makes	W Blamec'	I character		W DiaMec	SB-1696	Dimensions W x D x Hmm	170 x 110 x 362 (with terminal cover)	165 x 172 x 110	
N S SEE	SR-1698 17W 26AH (TV)		Seeked Recompanie Ballery Ombiz-Jon Girl.	2V 200AH	Weight	14.5kg	8.35kg		
Pb.	A	- GEL Technology -	100	District of the last	2 V 200AII	Special Order	YES	NO	
-1699	CE M Pb	THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAM		R CC		SB-1699	SB-1695	SB-1697	
12V 38AH	SR-1698	12V 26AH	ത്ത	E BCE	Terminal voltage	12V	12V	12V	

	12V 30AH	2B-1698	12V 26AH	(a) (a) (b)	The state of	icililla voltage	124	124	121
				PRICE		Nominal capacity	20 hour rate 38.8Ah	20 hour rate 100Ah	20 hour rate 200Ah
				PRILE		Capacity at 0°C	86%	86%	86%
7	Туре	Cat.	Qty 1+	Qty 4+	Qty 10+	Self discharge	9% after 3 months		9% after 3 months
	2V 200Ah	SB-1696	\$199.00	\$178.95	\$158.95	Jen disendige	(residual capacity 91%)	(residual capacity 91%)	(residual capacity 91%)
	12V 26Ah	SB-1698	\$129.00	\$115.95	\$102.95	Dimensions	197 x 165 x 170	330 x 173 x 223	523 x 239 x 223
	12V 38Ah	SB-1699	\$189.00	\$169.95	\$150.95	W x D x Hmm	137 X 103 X 170	JJU X 173 X 223	J2J X 2J3 X 22J
	12V 100Ah	SB-1695	\$379.00	\$345.00	\$305.00	Weight	13kg	31.5kg	62kg
	12V 200Ah	SB-1697	\$699.00	\$629.00	\$559.00	Special Order	NO	YES	YES

12V 150Ah Sleek AGM Deep Cycle Battery

This high performance deep cycle AGM battery offers an excellent power storage solution to those with minimal space. A high energy density and top grade materials allow such a high capacity of 150Ah to be packed into such a small footprint - just 123 x 556mm, suitable to fit into a standard 23" rack. Front terminal access makes battery connections neat and simple, and the durable carry handles allow for easier handling and inspection. Designed to perform in harsh tropical conditions, and with a superior high rate discharge performance and higher cycle service life, this battery is perfect for a wide array of applications including remote solar systems, caravan and RV, motor home, and marine. With a float voltage of 13.5V, this AGM battery is perfectly suited to caravans to make the most of charging off the engine alternator. See our website for a full specification datasheet.

- Small footprint to suit installations in tight areas such as marine, caravans or motor homes
 Design Float life of 12+ years in accordance with Eurobat classification of long life battery
 Suitable for standard 23" rack
- Advanced AGM (absorbed glass matt) separator offering longer service life and superior high rate discharge performance
- Threaded post copper insert terminals offering high conductivity Fire retardant container and cover (UL40 V0)
- Compliant to IEC 60896-21/22:2004 and UL approved

Note: Not stocked in all stores, call first

7	Туре	Cat.	Qty 1+	Qty 4+	Qty 10+
	12VDC 150Ah	SB-1822	\$699.00	\$629.00	\$559.00



POWERSTACK BATTERY BANKS

Powerstack High Performance VRLA Battery Banks with Racking

Making a substantial investment in a large renewable energy or remote power system means you should have the best battery technology available. Able to withstand deep discharge to 0% capacity for 1000 cycles, the Powerstack battery banks are the last word in genuine deep-cycle technology ensuring long service life. The modular, stackable rack design enables easy installation and offers complete flexibility for future system expansion. This racking is something that you just don't get with other deep cycle batteries, and makes such a difference to ease of use and flexibility of installation. This significantly reduces your installation costs as you don't have to go out and make your own rack for your battery bank - that's all done for you with the Powerstack

Each Powerstack comes fully loaded with six 2V deep cycle valve regulated lead acid (VRLA) cells, and includes interconnecting busbars to connect up each cell to make the 12V bank. The construction of each cell is flame retardant copolymer casing with lead coated copper conductor terminals, the racking is steel painted in acid resistant paint, and all parts can be recycled. Suitable for mining, defence, UPS backup, transmission, telephony as well as high end alternative energy systems and remote area power systems

Due to the size and weight of these very specialised units they will only be available for dispatch direct from our central warehouse in Sydney and Auckland. Freight will be additional - contact us for a quotation.

See our website for full specifications and downloadable datasheets.

- Modular stackable designSelf discharge: Less than 1% per week
- Cycle life: 4000 cycles at 20% discharge, 1000 cycles at 100% discharge
- Design life: 20 years

NOTE: BE AWARE THAT FREIGHT CHARGES APPLY!



		GEI A Q	UOIE FIRSI.		WARRANTU
7	Туре	Cat.	Qty 1+	Qty 2+	Qty 4+
	12V 600Ah	SB-1800	\$2,799.00	\$2,519.00	\$2,239.00
	12V 1350Ah	SB-1802	\$5,799.00	\$5,219.00	\$4,639.00

Specifications	SB-1800	SB-1802
Tuno	Valve Regulated Lead	Valve Regulated Lead
Туре	Acid deep-cycle battery	Acid deep-cycle battery
Rating	12V 600Ah	12V 1350Ah
Ah efficiency	>90%	>90%
Charging voltage	2.23 - 2.3V per cell	2.23 - 2.3V per cell
Charging current	60 - 120A	135 - 270A
Bank dimensions	706(W) x 477(H) x 550(D)mm	706(W) x 802(H) x 550(D)mm
Bank weight	260kg	530kg

POWERSTACE

Power Management Systems

COMBI SERIES INTERACTIVE INVERTER-CHARGERS

Packed inside each Combi Series Interactive inverter-charger are three main components: a powerful low-frequency pure sine wave inverter, a high power 4-stage battery charger, and a fast action automatic AC transfer switch. By including all the core functionality within one unit, the Combi Series are able to provide fully automatic operation and management of your entire power system. Be it a carayan, motorhome. marine vessel, off grid home, or backup power system - the Combi Series Interactive inverter-chargers have all the features you need, plus many many more.

See our dedicated power systems website www.jaycar.com.au/powertech for downloadable product information brochures and specifications, or email our team of power experts for more information at powertech@jaycar.com.au



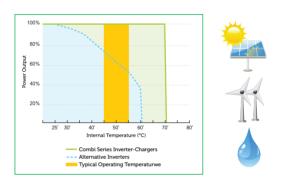


- Powerful sine wave inverter, battery charger & automatic AC transfer switch in 1 unit
 Compact design with big power handling
 Power output guaranteed up to 70°C, perfect for harsh outback conditions

- Intelligent, automatic power management
 Automatically switches between inverter power, generator power and park power (or other AC input)
 Automatically charges the batteries when an AC generator (or other AC power source)
- is connected
- s connected
 Can automatically start the generator when required
 Boost the AC input power with inverter power for more output power!
 Stack multiple units for more power
 2-phase and 3-phase capable
- · Options for full control & monitoring of solar, AC generator, DC charging, DC loads, etc
- Expanding options allow for cost effective and simple upgrades
 Designed in Australia to suit harsh Australian conditions









Feature	CombiPlus	SuperCombi
Intelligent grid & generator power management	*	*
ATS uninterrupted AC transfer switch	*	*
Power output rated to 70°C	*	*
2-phase and 3-phase capability	*	*
Stackable for more power	*	*
Power Support feature	*	*
Dynamic Power Shifting	*	*
4-Stage adaptive charging system	*	*
Solar Charging control (accessories required)	*	*
Full remote system control (accessories required)	*	*
Auto generator start function	*	*
Aux. battery charge output	*	*
Programmable Aux. relay outputs (x3)	*	*
Interactive Pure Sinewave Inverter-Charger	*	*
DC Load control (accessories required)		*
AC Charger Timer and Generator Timer control		*
DC Charging Control (accessoires required)		*

7		Cat.	Qty 1+	Qty 3+
CombiPlus	12V 1500W	MI-5270	\$2,399.00	\$2,279.00
CombiPlus	24V 3000W	MI-5273	\$3,499.00	\$3,325.00
SuperCombi	12V 1500W	MI-5250	\$2,699.00	\$2,565.00
SuperCombi	24V 1500W	MI-5251	\$2,699.00	\$2,565.00
SuperCombi	12V 3000W	MI-5252	\$3,999.00	\$3,799.00
SuperCombi	24V 3000W	MI-5253	\$3,999.00	\$3,799.00

Power Management Systems

COMBIR		ECIFICATIONS		SUPERCOMBI SE	ECIFICATIONS	
CombiPlus Specifications	MI-5270	MI-5273	MI-5250	MI-5251	MI-5252	MI-5253
Туре	12V 1500W	24V 3000W	12V 1500W	24V 1500W	12V 3000W	24V 3000W
General						
Power sharing	10A	20A	10A	10A	20A	20A
Auto transfer	16A	32A	16A	16A	32A	32A
Power stacking & 2 / 3 phase option	Yes	Yes	Yes	Yes	Yes	Yes
Weight	21kg	27kg	21kg	21kg	27kg	27kg
Dimensions L x W x H	370 x 258 x 362	370 x 258 x 424	362 x 258 x 370	362 x 258 x 370	424 x 258 x 370	424 x 258 x 370
Inverter						
Output power continuous at 70°C	1500W	3000W	1500W	1500W	3000W	3000W
Output power surge	3000W	6000W	3000W	3000W	6000W	6000W
No load power	8W	12W	8W	8W	12W	12W
Input voltage	9.3 - 17VDC	18.6 - 34VDC	9.3 - 17VDC	18.6 - 34VDC	9.3 - 17VDC	18.6 - 34VDC
Output voltage	210 - 245VAC					
Output waveform	Pure sine wave					
Efficiency	82%	86%	82%	84%	84%	86%
AC Charger						
Input voltage	180 - 270VAC					
Maximum DC ripple	<1.25VRMS	<1.25VRMS	<1.25VRMS	<1.25VRMS	<1.25VRMS	<1.25VRMS
Output charge voltage	12 - 16VDC	24 - 32VDC	12 - 16VDC	24 - 32VDC	12 - 16VDC	24 - 32VDC
Charge current (main batteries)	70A	70A	70A	35A	140A	70A
Charge current (aux battery)	4A	4A	4A	4A	4A	4A
AC Input Switch						
Thermal circuit breaker	15A	30A	15A	15A	30A	30A
AC input fault detection time	4 - 10ms					
Trip level mains to inverter (user adjusted)	<180VAC	<180VAC	<180VAC	<180VAC	<180VAC	<180VAC
Trip level inverter to mains (user adjusted)	>187VAC	>187VAC	>187VAC	>187VAC	>187VAC	>187VAC

ACCESSORIES FOR COMBIUNITS

SunStar Solar Charge Controllers

Commercial grade solar charge controllers that can link with Combi Series units for centralised control

• See page 332





7		Cat.	Qty 1+	Qty 2+	Qty 4+
	45A	MP-3726	\$329.00	\$299.00	\$265.00
	60A	MP-3728	\$389.00	\$355.00	\$315.00

SunStar MPPT 50A Solar **Charge Controller**

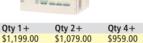
High grade 50A MPPT solar charge controller for maximum charging efficiency.

> Cat. MP-3736

• See page 322







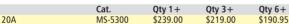
Mains Auto Transfer Switch

A high quality, 20A ATS that can link with Combi Series units to select between multiple AC inputs and adjust Combi settings accordingly.

• See page 339

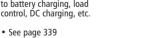






DC Voltage Sensitive Relay

Bi-directional voltage sensitive relay that can link with a SuperCombi unit for battery to battery charging, load control, DC charging, etc.



7	Cat.	Qty 1+	Qty 3+	Qty 6+
140A	MI-5282	\$229.00	\$209.00	\$182.95

Solarworx Grid Inverter

A multi-purpose grid inverter that can link with a Combi Series based power system to create a hybrid on-grid/off-grid power system.

• See page 338





				4	
7		Cat.	Qty 1+	Qty 3+	Qty 6+
	2000W 12V	MI-5192	\$1,999.00	\$1,799.00	\$1,599.00
	2000W 24V	MI-5194	\$1,999.00	\$1,799.00	\$1,599.00

Remote Control Panel

A full functioning wired remote control interface for the Combi Series units, allowing complete control and monitoring of your SuperCombi/CombiPlus from a separate location.
MI-5259 Remote Control Panel for SuperCombi

MI-5279 Remote Control Panel for CombiPlus

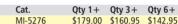


7		Cat.	Qty 1+	Qty 3+	Qty 6+
	Remote Control for SuperCombi	MI-5259	\$379.00	\$345.00	\$305.00
	Remote Control for CombiPlus	MI-5279	\$329.00	\$299.00	\$265.00

Multiphase Data Hub for **Combi Series**

Required to link multiple units for 2/3-phase configurations.





Parallel Stack Data Hub for Combi Series

Required to stack multiple units to increase power output.





Qty 6+ Qty 1+ Qty 3+ MI-5277 \$179.00 \$160.95 \$142.95

Battery Temperature Sensor for Combi Series

Highly recommended to protect your battery bank. Using the battery temperature sensor will allow the Combi Series units to adjust charging voltage and current depending on battery temper

,				
7	Cat.	Qty 1+	Qty 3+	Ç
	MI-5278	\$60.00	\$61.05	¢

CombiPlus/SuperCombi Data Leads

Data leads for CombiPlus and SuperCombis. These allow data connection between our SuperCombi and CombiPlus units and their external accessories - such as DC switch controller (MI-5282) and solar charge controllers (MP-3726/MP-3728) - to allow the SuperCombi/CombiPlus to communicate directly and provide centralised programming and control of all components.

• Also required for parallel stacking of MP-3726 and MP-3728 solar charge controllers.

Specification	ons
Sheath	Black PUR, V90 flame retardant.
Conductor	Plain copper wire
Insulation	V75

7		Cat.	Qty 1+	Qty 3+	Qty 6+
3	3m	WI-5250	\$35.00	\$31.45	\$27.95
ļ	5m	WI-5252	\$45.00	\$40.45	\$35.95
	10m	WI-5254	\$55.00	\$49.45	\$43.95



Grid Connect Inverters

GRID CONNECT INVERTERS

These SolarWorx Grid-Tie inverters differ from most Grid-Tie These SolarWork Grid-Tie inverters differ from most Grid-Tie inverters currently on the market, as they allow you to feed power back into the grid either directly from your solar panel array, or feed power back into the grid from a battery bank that is charged externally by your solar array or other renewable source using an external solar charge controller. This provides a level of flexibility rarely seen with grid-tie inverters on the market, as it easily allows you to combine the government sponsorship of a grid-tie system with the full

power management and backup power capabilities of our fantastic SuperCombi and CombiPlus systems.

If connected directly to the solar array, photovoltaic power is controlled by the

SolarWorx grid-tie using Maximum Power Point Tracking (MPPT) to ensure the maximum amount of solar power is obtained and fed back into the grid at all times.

As mentioned, the bonus feature of these SolarWorx grid-tie inverters is that they can alternatively use a battery bank to convert battery stored power and feed that back into the grid. This enables much greater control over the way you manage and store the solar generated power, as it

allows you to easily connected to pre-existing battery based systems, or gives you the ability to add multiple renewable power sources such as wind and hydro, or even add an advanced power management system such as a SuperCombi or CombiPlus to provide full blackout and power backup protection.

GRID TIE INVERTER 12VDC 2000W Cat. MI-5192

GRID TIE INVERTER 24VDC 2000W

Available in 12V and 24V variations, and rated at 2000W output, these SolarWorx grid-tie inverters will allow you to maximise your government rebate and yet still allow you to further expand your solar system in the future without needing to replace your Grid-Tie inverter. Made by the same manufacturer as our brilliant SuperCombi and CombiPlus units, these are backed by an Australian-serviced 2 year manufacturer's warranty. Extended warranty options also available.

See our website, or www.richelectric.com.au for downloadable user manual and example system connection diagrams. NOTE: Contact your local electricity provider for details on grid-tied solar power credits. Special metering is required to receive feed-in tariffs.

- AC circuit breakers built in
- Suitable for use with solar, wind*, hydro or other renewable energy sources
- Maximum Power Point Tracking (MPPT) system High efficiency
- Pure sine wave output
- Low frequency inverter design (based on toroidal transformer) LCD front panel display provides readout of system parameters

- Programmable via front panel Feeds power to the grid either directly from a solar array or from energy stored in a battery bank
- Optional external remote control







7	Cat.	Qty 1+	Qty 3+	Qty 6+
2000W 12VDC	MI-5192	\$1,999.00	\$1,799.00	\$1,599.00
2000W 24VDC	MI-5194	\$1,999.00	\$1,799.00	\$1,599.00

Freecall order hotline: 1800 022 888

*Wind turbine generators must have clean DC output. External turbine regulator may be required for AC/3-phase wind generators where a battery bank is not used.

ameters					
Specifications:	MI-5192	MI-5194			
Input					
Max input power at 50°C	2400W	2400W			
Max DC input current	180A	90A			
Max DC input voltage	40VDC	80VDC			
MPPT range	16.5 - 32VDC	32 - 64VDC			
Battery Input Voltage	10-16VDC	20-32VDC			
Output					
Output power nominal	2000W	2000W			
Output power max	2200W	2200W			
Output voltage range	205 - 265VAC				
Output frequency	50Hz±1Hz				
Night power consumption	Nil				
Input/output isolation	3500VDC via toroid				
Anti islanding protection		over/under frequency			
	active phase shift				
Parameters displayed	PV voltage, PV curre				
		ent, feed power, kWH			
Dimensions	424(H) x 256(W) x 3	68(D)mm			
Weight	26kg				
Approval	SAA100339				

SAMPLE SYSTEMS





See our dedicated power systems website for downloadable product information brochures and specifications, or email our team of power experts for more information. www.jaycar.com.au/powertech powertech@jaycar.com.au



*Wind turbine generators must have clean DC output. External turbine regulator may be required for AC/3phase wind generators where a battery bank is not used.

*Hybrid System

In this system, a SuperCombi inverter/charger system is put in between the Grid-Tie inverter and the grid, and the two are linked. In this mode, you can take advantage of the features of BOTH the Grid-Tie system and the SuperCombi - providing such features as charging the batteries from solar power during the day, off-peak battery charging from grid at night, full blackout and backup protection, handsome feed-in tariffs and more.

REDEWABLE

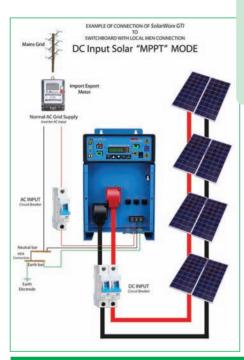
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POMER

Grid Connect Inverters

GRID CONNECT

SYSTEM EXAMPLES



*MPPT mode

Standard Grid-Tied solar system. where the solar panels are connected directly to the Grid-Tie inverter's input with MPPT functionality. Solar power is fed directly into the grid via the Grid-Tie inverter.

Contact your local electricity provider for details on grid-tied solar power credits. Special metering is required to receive feed-in tariffs

*BATTERY MODE

Solar panels, and/or other alternative energy sources, are connected to a battery bank via external charge controllers. Power is fed from the battery bank into the Grid-Tie inverter, and then fed back into the grid.



AUTO TRANSFER SWITCH & DC CHARGE CONTROLLER

Mains Auto Transfer Switch

The automatic transfer switch (ATS) allows you to connect your 240V power load to a mains power source, with a backup power source connected should the mains power source be interrupted, and provides automatic transfer for the load from the mains source to the backup source. Perfect for caravans and motor homes already fitted with an inverter and battery setup, as it allows the caravan to plug into "park" power, and automatically switch over to inverter power once unplugged from the caravan park supply. Also suitable for home or office backup power systems, or anywhere where a master and slave power source is present and automatic switching of the power source is required.



- Suitable for sensitive electrical equipment
- Monitors master power input with power protection Total switching time less than 12milliseconds
- Switching capacity: 20A Frequency: 50/60Hz (selectable)
- Universal output sockets
- Hard wired master & slave input terminals
- LED power status indicators



Battery-to-Battery DC Charge Controller 12-24V 140A

This advanced, programmable Battery-to-Battery DC Charge Controller can be used in This advanced, programmable Battery-to-Battery DC Charge Controller can be used in three different and distinct ways making it a genuine battery management control system, it can be used as a bi-directional, fully programmable battery to battery charge controller. Alternatively, it can be used as an independent, fully programmable DC load controller low voltage disconnect/re-connect with programmable twin timer functions. Or finally, it can be used in conjunction with the SuperCombi power management system as the DC load controller or DC generator input. Being fully programmable via the large LCD and simple intuitive front panel controls, the possible applications for this little device are vast and the programmable flexibility allows for even the more abnormal installations - even if he battery is mounted right up the other end of your caravan with 20m of cable from the the battery is mounted right up the other end of your caravan with 20m of cable from the DC charging source, you can adjust the voltage set points to compensate for voltage drop of the cables. Suitable for 12V or 24V systems, up to 140A maximum current.





1	Cat.	Qty 1+	Qty 3+	Qty 6+
140A DC Switch Controller	MI-5282	\$229.00	\$209.00	\$182.95



Specifications		
Operating voltage	9-35VDC	
Rated continuous current	100A/12V, 70A/24V	
Rated intermittent current	140A/12V, 100A/24V	
Dimensions	111(W) x 90(H) x 58(D)mm	
See website to download user manual.		

Remote Power Systems

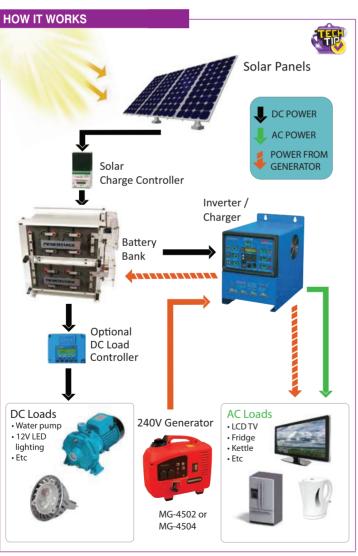
REMOTE POWER PACKAGES



For those living in locations where mains electricity isn't available, or is prohibitively expensive to have connected, a remote power system is the best solution to household power needs. Be it your home, your weekend getaway or an outlying shed on your property, we have the right combination of products to satisfy your power requirements. We've been selling solar panels, wind turbines, DC to AC inverters and deep cycle batteries for years, so you can be sure that the equipment we supply will stand the test of time and rigours of daily use. Whilst a remote power system can be a major investment, there are government incentives and rebates available that may support your purchase*.

We currently have 3 packages available and each contains the necessary number of solar panels, a fully featured invertercharger power management system, solar charge controller, high capacity deep cycle battery banks, cables, connectors and cable-termination tooling. Just add the appropriate panel mounting hardware and you are ready to go. Please contact us for full system details, pricing and sales material. Systems can be customised to individual needs. Just ask in-store or online at www.jaycar.com.au/powertech

Check with your relevant local and state authorities on what rebates are available and whether they apply to your particular application/installation. For most installations the Solar Credits Scheme is the applicable Govt. incentive.



PACKAGE SYSTEM ONE 3.0kWh PER DAY*

WITH 1.0KW SOLAR

Three days system autonomy at 3kWh per day usage. About 3.5kWh solar charging provided per day on average.

- Powering household appliances of under 2kW for short periods
 Energy-efficient lighting such as compact fluoro and LED
 Efficient AC or DC refrigerators

- Small DC water pump
 Laptop, LCD TV, DVD player etc
- · Efficient washing machine on sunny days

Cat. MP-9005

\$10,790.00

Ask for pricing

MORE INFO AVAILABLE

PACKAGE SYSTEM TWO 5.0kWh PER DAY*

WITH 1.575KW SOLAR

Four days system autonomy at 5kWh per day usage. About 5.2kWh solar charging provided per day on average.

- Powering most common household appliances
 Energy-efficient lighting such as compact fluoro and LED
- May be used for stoves and hot water but gas is recommended
- 5 star rated refrigerators
- Laptop, LCD TV, DVD player etc
- Efficient washing machines Short use of resistive loads like
- toasters and kettles

Cat. MP-9007

E INFO AVAILABLE Ask for pricing

\$17,890.00

PACKAGE SYSTEM THREE 10.0kWh PER DAY*

WITH 3.15KW SOLAR

Four days system autonomy at 10kWh per day usage. About 10.4kWh solar charging provided per day on average.

- Almost any household appliance
- · Stoves, ovens and hot water systems

Cat. MP-9009

MORE INFO AVAILABLE Ask for pricing

\$32,590.00

Modified Sine Wave Inverters

MODIFIED SINE & SINE WAVE INVERTERS

Wattage	Input	Waveshape	Surge	Input Connection	Page	Cat.
75W NEW	12V	Modified Sine	120W	Lighter Plug	341	MI-5124
150W	12V	Modified Sine	300W	Lighter Plug	341	MI-5125
150W	12V	Modified Sine	450W	Lighter Plug	341	MI-5121
150W	12V	Modified Sine	450W	Lighter Plug	342	MI-5102
180W	12V	Pure Sine	300W	Lighter Plug	344	MI-5160
200W	12V	Modified Sine	400W	Lighter Plug	341	MI-5103
300W	12V	Modified Sine	1000W	Lighter Plug or Battery Clips	342	MI-5104
380W	12V	Pure Sine	650W	Heavy Duty Screw-down Terminals	344	MI-5162
400W	12V	Modified Sine	1200W	Battery Clips	342	MI-5106
400W	24V	Modified Sine	1200W	Battery Clips	342	MI-5107
600W	12V	Modified Sine	1500W	Eye Terminals	343	MI-5108
600W	12V	Pure Sine	1000W	Heavy Duty Screw-down Terminals	344	MI-5164
800W	12V	Modified Sine	2000W	Eye Terminals	343	MI-5110
1000W	12V	Modified Sine	2500W	Eye Terminals	343	MI-5112
1000W	12V	Pure Sine	2000W	Heavy Duty Screw-down Terminals	344	MI-5170
1500W	12V	Modified Sine	3500W	Eye Terminals	343	MI-5114
1500W NEW	12V	Pure Sine	3000W	Heavy Duty Screw-down Terminals	345	MI-5172
2000W	12V	Pure Sine	4000W	Heavy Duty Screw-down Terminals	345	MI-5176
2000W	24V	Modified Sine	4500W	Eye Terminals	344	MI-5116
2000W	24V	Pure Sine	4000W	Heavy Duty Screw-down Terminals	345	MI-5174

INVERTERS - MODIFIED SINE WAVE RANGE

Getting 230VAC to run small electrical appliances from your cars battery is easy with our range of general purpose inverters. We have models suitable for charging your laptop in the bush to running a microwave in a motor home. They have fan assisted cooling and electrical isolation for safety.

75W 12VDC to 230VAC Isolated Inverter

This must have car accessory, converts your 12VDC cigarette lighter into a convenient 240VAC power point. Ultra compact in size and great for camping enthusiasts or people who have mobile energy needs. It can power equipment such as mobile phone chargers, digital cameras,

iaptops of electronic gaugets	on the road.	
Specifications		
Highly portable and versatile		
Output power	70W	, ' > 1
Surge power	120W	
Input voltage	10 - 14.8V	
Efficiency	90.5%	
Output waveform	Modified sine wave	POWERT
Dimensions (L x W x H)mm	115 x 57 x 30	TENTER

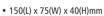
Cat.

MI-5124

150W 12VDC to 230VAC with USB Outlet

75W 12VDC

Extremely compact at only 150mm long (including the inlet plug). In addition to being a 150W modified sine wave inverter, it also has a USB port. You can charge or power your MP3 player or any other device that's normally used on a USB port on your computer.





TECH TIP

IMPORTANT NOTE

Do not regard the power point of an inverter as identical to a household power point. There are subtle differences. Please read the notices below an on the next page.



150W 12VDC to 230VAC Isolated Inverter

Designed to fit cleanly into your car's drink holder, this can sized inverter alleviates the need for permanent mounting of your inverter and avoids having it flapping around on the passenger seat only to go flying to the floor when you hit the brakes. Featuring a 150W output, this inverter is deceptively small but still has the grunt to power up everything from battery chargers right through to your laptop

computer. Also it features all the safety features which are necessary with inverters including electrical isolation so mains voltages don't suddenly appear at your cigarette lighter socket.

• Dimensions: 130(L) x 60(Dia)mm • Lead Length: 600mm

Specifications	
Output Power (Continuous)	150W
Output Power (Surge)	450W
Input Voltage	10-15VDC
Output Voltage	230VAC +/-10%
Output Frequency	50Hz
Efficiency	90% typical
Standby Current	<500mA

Standby Current	<500mA		OWER	TECH
71	Cat.	Qty 1+	Qty 3+	Qty 6+
150W 12VDC	MI_5121	\$11.05	\$40.45	\$35.00

Multifunction 200W Inverter

Housed in a tough rubberised case, this is the ideal power accessory for your next camping, fishing or 4WD adventure. In addition to a 200W modified sine wave inverter, it also provides a USB outlet, an LED work light and two 12V cigarette lighter outlets. 12VDC connection is via cigarette lighter plug.

• 230(W) x 180(H) x 62(D)mm



INVERTERS - IMPORTANT NOTICE

We DO NOT recommend that you use these products to operate the following: AIR COMPRESSORS AIR CONDITIONERS An inverter is a device which converts 12 or 24VDC into 240VAC. The 240VAC generated is as lethal as the power in homes, and should be treated with the same respect. Inverters can be easily damaged, and connecting the input voltage terminals the wrong way around on the battery can damage the unit - be careful!!

Appliances most suitable for connection include: video recorders / players lightsfax machines most TVs most power tools

• most audio equipmen most computers Fluorescent lights can give a highly inductive load on start up which can damage inverters. Appliances not suitable include:

 electric blankets hair dryers toasters

 radiators
 heavy power tools (large angle grinders, circular saws etc)
Inverters will generally drive inductive loads such as electric motors, but only if the startup current is not high. Generally high startup current situations are when the motor is permanently coupled to a load such as a refrigeration or airconditioner compressor (Imagine the compressor at rest just before top dead centre you can easily realise the start up load on the motor!). Many other motors such as in drills, small angle grinders, buffers etc start up under virtually no load and this is usually OK for the inverter provided the tool is within the

inverter rating. It needs to be pointed out that one of the major differences between a domestic power point and inverter is that the source impedance of a power point is very low compared to the inverter. This is why inverters have trouble with appliances with high start up currents and a domestic power point does not. Another thing that must be remembered is the special case of fluorescent lights with ballast chokes in them (by far the most common type). Manufacturers of fluoro lights assume that they are just going to be installed to a norma 240V 50Hz sine wave supply. They are required to supply a product that does not overly distort the mains waveform. They generally comply with this by installing a, say, 3.3µF non polarised capacitor accross the mains/neutral supply inside the housing of the lamp fitting. This is called a power factor correction capacitor. This seems to work OK for a sine wave supply from a low source impedance.

When you drive such a device with modified sine wave 240V power, different things start to happen. The power factor correction capacitor presents a much greater load to a modified sine wave signal (which is a complex collection of high and low frequencies) than it would if it was a sine wave. The bottom line is to reduce this capacitor to about 0.47uF or take it out completely. Inverters are generally OK then.

It is also possible for an inverter to be damaged by the surges in current generated when using standard flourescent starters. This can be prevented by replacing the starter with an electronic starter.

INVERTERS - MODIFIED SINE WAVE RANGE - STANDARD RANGE

150 Watt (450 Watt Surge) 12VDC to 230VAC Electrically Isolated

150W
450W
< 300mA
12VDC
Modified sine wave
-
>90%
N/A
Cigarette lighter plug
0.85kg
165 x 91 x 58

Circuit Protection
Thermal shutdown/alarm 10.5V+/- 0.5V Low battery alarm Low battery shutdown Battery high shutdown 10.0V +/- 0.5V 15.5V +/- 0.5V External fusing 20A max

Suits laptop computers, recharging power tools or batteries, lamps and fluorescents up to 150W, fax machines etc.

Qty 3+ Qty 6+ 150W 12VDC MI-5102 \$44.90



Leads supplied

300 Watt (1000 Watt Surge) 12VDC to 230VAC Electrically Isolated

Specifications	
Output power - continuous	300W
Output power - surge	1000W
Standby current	< 300mA
Input voltage	102VDC
Output waveform	Modified sine wave
Output regulation	-
Efficiency	>90%
USB output	-
Input connection	Cigarette lighter or aligator clamps
Weight	1.1kg
Dimensions (L x W x H)mm	190 x 91 x 58

Circuit Protection
Thermal shutdown/alarm 10.5V+/- 0.5V Low battery alarm Low battery shutdown Battery high shutdown 10.0V +/- 0.5V 15.5V +/- 0.5V 35A max External fusing

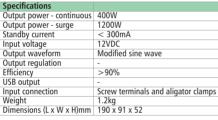






,	Cat.	Qty 1+	Qty 3+	Qty 6+
300W 12VDC	MI-5104	\$69.95	\$62.95	\$55.95





Thermal shutdown/alarm 10.5V+/- 0.5V Low battery alarm Low battery shutdown Battery high shutdown 10.0V+/- 0.5V 15.5V+/- 0.5V External fusing 50A max





7	Cat.	Qty 1+	Qty 3+	Qty 6+
400W 12VDC	MI-5106	\$89.00	\$79.95	\$70.95





400 Watt (1200 Watt Surge) 24VDC to 230VAC Electrically Isolated

•	• •
Specifications	
Output power - continuous	400W
Output power - surge	1200W
Standby current	<300mA
Input voltage	24VDC
Output waveform	Modified sine wave
Output regulation	-
	>90%
	-
	Screw terminals and aligator clamps
	1.2kg
Dimensions (L x W x H)mm	190 x 91 x 52
Input voltage Output waveform	24VDC Modified sine wave -> 90% - Screw terminals and aligator clamps 1.2kg

Circuit Protection Thermal shutdown/alarm 21VDC+/- 1V Low battery alarm 20VDC+/- 1V Low battery shutdown Battery high shutdown 30VDC+/- 1V External fusing 25A max



Suits laptop computers, recharging power tools or batteries, lamps and fluorescents up to 400W, 54cm televisions, 100W Halogen worklight, electric fan, fax machines etc.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
400W 24VDC	MI-5107	\$89.00	\$79.95	\$70.95







WHAT TO BUY - PURE SINE WAVE OR MODIFIED SINE WAVE?

"Modified" sine wave is a crude approximation of the 240V waveform, with square wave components in it. Many appliances are OK with this. Typically these are:

- Most TVs, VCRs CD/DVD players
- Fax machines
- Computers (most)
- Most switchmodé power supplies
- Small power tools
- Some audio equipment
- All incandescent lighting
- Sine wave is closer to mains and those inverters are much more efficient. Most appliances work OK with the lower cost modified sine.

Sine wave inverters are best for:

- Electric clocks
- Electronic weighing machines
- All other TVs
- Mains powered PA equipment

• Sensitive equipment

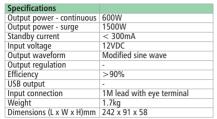
- Plug pack powered equipment
- Anything where you want to get the most out of a battery charge

LJEPIF)

Modified Sine Wave Inverters

MODIFIED SINE WAVE RANGE (CONTINUED)

600 Watt (1500 Watt Surge) 12VDC to 230VAC Electrically Isolated



Circuit Protection Thermal shutdown/alarm 10.5V+/- 0.5V Low battery alarm Low battery shutdown 10.0V+/- 0.5V 15.5V+/- 0.5V Battery high shutdown External fusing 80A max

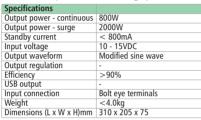
Suits laptop computers, recharging power tools or batteries, lamps and fluorescents up to 600W, 68cm televisions, power drills, blenders etc.

Qty 1+ Qty 3+ Qty 6+ 600W 12VDC MI-5108 \$149.00 \$133.95



800 Watt (2000 Watt Surge) 12VDC to 230VAC Electrically Isolated

Circuit Protection Thermal shutdown/alarm

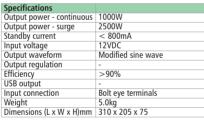


Suits lamps and fluorescents up to 800W, 68cm televisions and VCRs, power drills, blenders, belt sanders etc.

Cat. Otv 3+ Qty 6+ 800W 12VDC MI-5110 \$189.00 \$169.95 \$150.95



1000 Watt (2500 Watt Surge) 12VDC to 230VAC Electrically Isolated



Suits lamps and fluorescents up to 1000W, 68cm televisions and VCRs, power drills, blenders, microwave ovens, belt sanders etc.

10.5V+/- 0.5V Low battery alarm 10.0V+/- 0.5V Low battery shutdown 15.5V+/- 0.5V Battery high shutdown External fusing 140Δ max

Thermal shutdown/alarm

Rear View

Qty 3+

Circuit Protection Thermal shutdown/alarm

Low battery alarm Low battery shutdown

Battery high shutdown External fusing

Rear View



10.5V+/- 0.5V 10.0V+/- 0.5V 15.5V+/- 0.5V

210A max



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1000W 12VDC MI-5112 \$249.00 \$225.00 \$198.95 1500 Watt (3500 Watt Surge) 12VDC to 230VAC Electrically Isolated

`	J ,
Specifications	
Output power - continuous	1500W
Output power - surge	3500W
Standby current	< 1A
Input voltage	12VDC
Output waveform	Modified sine wave
Output regulation	-
Efficiency	>90%
USB output	-
Input connection	Bolt eye terminals
Weight	6.2kg
Dimensions (L x W x H)mm	395 x 240 x 90

Suits lamps and fluorescents up to 1500W, 68cm televisions and VCRs, power drills, blenders, microwave ovens, belt sanders, computers etc.

Cat. Qty 3+ Qty 6+ MI-5114 1500W 12VDC \$399.00 \$359.00 \$319.00







Lead supplied



Includes

Pure Sine Wave Inverters

MODIFIED SINE WAVE RANGE (CONTINUED)

2000 Watt (4500 Watt Surge) 24VDC to 230VAC Electrically Isolated

Specifications	
Output power - continuous	2000W
Output power - surge	4500W
Standby current	<2.5A
Input voltage	24VDC
Output waveform	Modified sine wave
Output regulation	-
Efficiency	>90%
USB output	-
Input connection	Bolt eye terminals
Weight	5.6kg
Dimensions (L x W x H)mm	395 x 240 x 90



2000W 24VDC

MI-5116

\$499.00 \$449.00 \$399.00

PURE SINE WAVE INVERTERS

Our fantastic range of pure sine wave inverters are able to provide bundles of power in mobile and permanent installations. They range in power from 180 to 2000 watts and have been selected and rigorously tested for their durability and design. In addition to the normal 230VAC outlet, all models also have a USB port for

powering all your gadgets. This range of pure sine wave inverters is suitable for any application where you want to run sensitive equipment and the larger units can be used in permanent installations such as caravan, 4WD, camper or even marine.

180 Watt 12VDC to 230VAC - Electrically Isolated

4	C-4	0+
Dimensions (L x W x H)mm	240(L) x 119(W) x 60(H)	
Weight	1kg	
Input connection	Fixed cigarette lighter lead	
USB output	5VDC @ 500mA	
Efficiency	>80%	
Output frequency	50Hz	
Output regulation	+/-3%	
Output waveform	Pure Sine wave	
Input voltage	12VDC	
Standby current	< 400mA	
Output power - surge	350W	
Output power - continuous	180W	
Specifications		

Circuit Protection 60°C +/-4°C 10.5VDC+/- 0.5VDC Thermal shutdown/alarm Low battery alarm Low battery shutdown 10.0VDC+/- 0.5VDC 15.5VDC+/- 0.5VDC Battery high shutdown Thermal shutdown Reverse polarity Internal fuse



Qty 1+ Qty 6+ MI-5160 \$189.00 \$169.95

380 Watt 12VDC to 230VAC - Electrically Isolated

Specifications	
Output power - continuous	380W
Output power - surge	750W
Standby current	< 500mA
Input voltage	12VDC
Output waveform	Pure sine wave
Output regulation	< +/-3%
Efficiency	>83%
USB output	5VDC 500mA
Input connection	Heavy duty screw down terminals
Weight	1.1kg
Dimensions (L x W x H)mm	240 x 119 x 60

60°C +/-4°C 10.5V+/- 0.5V 10.0V+/- 0.5V 15.5V+/- 0.5V Thermal shutdown/alarm Low battery alarm Low battery shutdown Battery high shutdown 35A max



380W 12VDC

MI-5162

\$239.00 \$219.00 \$190.95

600 Watt 12VDC to 230VAC - Electrically Isolated

	•
Specifications	
Output power - continuous	600W
Output power - surge	1200W
Standby current	< 650mA
Input voltage	12VDC
Output waveform	Pure sine wave
Output regulation	< +/-3%
Efficiency	>85%
USB output	5VDC 500mA
Input connection	Heavy duty screw down terminals
Weight	1.4kg
Dimensions (L x W x H)mm	300 x 119 x 60

60°C +/-4°C 10.5V+/- 0.5V 10.0V+/- 0.5V 15.5V+/- 0.5V Thermal shutdown/alarm Low battery alarm Low battery shutdown Battery high shutdown



Qty 3+



\$279.00

600W 12VDC 1000 Watt 12VDC to 230VAC - Electrically Isolated

Specifications	
Output power - continuous	1000W
Output power - surge	2000W
Standby current	< 900mA
Input voltage	12VDC
Output waveform	Pure sine wave
Output regulation	< +/-3%
Efficiency	>90%
USB output	5VDC 500mA
Input connection	Heavy duty screw down terminals
Weight	3.2kg
Dimensions (L x W x H)mm	323 x 200 x 88

Circuit Protection	
Thermal shutdown/alarm	60°C +/-4°C
Low battery alarm	10.5V+/- 0.5V
Low battery shutdown	10.0V+/- 0.5V
Battery high shutdown	15.5V+/- 0.5V
Overload	shutdown
Short circuit	shutdown
Battery reverse	Internal fuse

\$539.00



\$479.00



1000W 12VDC

Freecall order hotline: 1800 022 888

Qty 1+

\$599.00

Cat.

MI-5170

Pure Sine Wave Inverters

PURE SINE WAVE RANGE (CONTINUED)

1500 Watt 12VDC to 230VAC - Electrically Isolated

Specifications	
Output power - continuous	1500W
Output power - surge	3000W
Standby current	< 1200mA
Input voltage	12VDC
Output waveform	Pure sine wave
Output regulation	< +/-3%
Efficiency	>90%
USB output	5VDC 500mA
Input connection	Heavy duty screw down terminals
Weight	4.2kg
Dimensions (L x W x H)mm	420 x 200 x 88

1500W 12VDC

Circuit Protection	
Thermal shutdown/alarm	60°C +/-4°C
Low battery alarm	10.5V+/- 0.5V
Low battery shutdown	10.0V+/- 0.5V
Battery high shutdown	15.5V+/- 0.5V
Overload	shutdown
Short circuit	shutdown
Battery reverse	Internal fuse



Qty 3+ \$809.00



\$719.00



2000 Watt 12VDC to 230VAC Pure Sinewave Inverter - Electrically Isolated

\$899.00

Qty 1+ \$1,199.00

Qty 1+

\$1,199,00

Specifications	
Output power continuous	2000W
Output power surge	4000W
Standby current	1800mA
Input voltage	12VDC
Output waveform	Pure sine wave
Efficiency	>90%
Output regulation	<+/-3%
Output frequency	50Hz
USB output	5VDC +/-5% 500mA
Input Connection	Heavy duty screw terminals
Dimensions (L x W x H)mm	520 x 200 x 88m
Weight	5.5kg
7	Cat.

Circuit Protection
Thermal shutdown & alarm
Thermal shutdown & alarm
Thermal shutdown & alarm
10.5VDC +/-0.5VDC
Battery low shutdown
10VDC +/-0.5VDC
High battery shutdown
16VDC +/-0.5VDC
Overload
Shutdown
Short circuit
Shutdown
Battery reverse
Internal fuse





Qty 3+ Qty 6+ \$1,079.00 \$959.00

2000 Watt 24VDC to 230VAC - Electrically Isolated

MI-5176

Specifications	
Output power - continuous	2000W
Output power - surge	4000W
Standby current	< 950mA
Input voltage	24VDC
Output waveform	Pure sine wave
Output regulation	< +/-3%
Efficiency	>90%
USB output	5VDC 500mA
Input connection	Heavy duty screw down terminals
Weight	5.5kg
Dimensions (L x W x H)mm	520 x 200 x 88

60°C +/-4°C
21V+/- 0.5V
20.0V+/- 0.5V
32V+/- 0.5V
shutdown
shutdown
Internal fuse

Qty 3+

\$1,079.00







PURE SINE WAVE INVERTER / CHARGERS

1500W / 2000W 12VDC Sine Wave Inverter/Chargers

Cat.

MI-5174

Combining the functions of a pure sine wave inverter, battery charger and automatic transfer switch in one unit, these are the ideal power solution for mobile and recreational vehicle applications. When connected to the mains, the load is taken from the mains and the connected batteries are charged. If the mains is interrupted or exceeds the allowable limits, power is drawn from the batteries and mains power is provided by the inverter. This ensures a seamless supply of power in your caravan, 4WD or recreational vehicle - plug into mains power when it's available, and automatically flick over to battery power when mains is removed. No more manual switching from mains to battery power!

The inverter output is phase-synchronised to the mains input so the transition is genuinely

The inverter output is phase-synchronised to the mains input so the transition is genuinely seamless and if the mains is interrupted and resumed, there is a time delay before power is swapped from the batteries back to the mains to ensure that the mains supply is on line and stable: this provides protection from brownouts as well as blackouts. The inverter stage is pure sine wave and the electronics are extremely robust and reliable. Changeover time from mains to inverter is less than 8ms and from inverter to mains less than 5ms, and AC changeover is rated to 16A.

Two models available 1500 WATT Cat. MI-5260 2000 WATT Cat. MI 5262

2000W 24VDC

Features 15A mains output socket and 15A rated AC input terminals to suit AC circuits on most caravans/motorhomes

\$879.00

\$989.00

\$1,099.00



Specifications:	MI-5260	MI-5262	Specifications (continued)	MI-5260	MI-5262
Output power - continuous	1500W	2000W	Weight	5.2kg	6.4kg
Output power - surge	3000W	4000W	Dimensions (L x W x H)mm	520 x 200 x 88	615 x 200 x 88
itandby current	1200mA	2000mA	Circuit Protection:		
Mains input voltage	190 - 265VAC 16A max	190 - 265VAC 16A max	Thermal shutdown	63°C	63°C
Battery voltage	12VDC	12VDC	Low battery alarm	10.5VDC	10.5VDC
Output waveform	Pure sine wave	Pure sine wave	Low battery shutdown	10VDC	10VDC
Output regulation	3%	3%	High battery shutdown	15VDC	15VDC
fficiency	>90%	>90%	Short circuit	Shutdown	Shutdown
Battery charge current	20A	20A	Battery reverse polarity	Internal fuse	Internal fuse
nput connection	Screw terminals	Screw terminals,			

MI-5260

1500W 12VDC

2000W 12VDC

MI-5262

\$1,399.00

\$1,259.00 \$1,119.00



REGULATED - FIXED VOLTAGE

They are extremely light and compact; enough to snugly and neatly fit side by side on a powerboard - no more wasted AC outlets!

They incorporate high-efficiency circuitry, built in EMI filter, short circuit protection, over current protection and thermal shutdown capability.

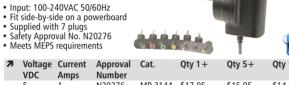


5 Watt - Ultra-slim

RENEWABLE ENERGY

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7	Voltage	Current	Approval	Cat.	Qty 1+	Qty 5+	Qty 10+
	VDC	Amps	Number				
	5	1	N20276	MP-3144	\$17.95	\$15.95	\$14.35
	6	0.8	N20276	MP-3145	\$17.95	\$15.95	\$14.35
	9	0.5	N20276	MP-3146	\$17.95	\$15.95	\$14.35
	12	0.4	N20276	MP-3147	\$17.95	\$15.95	\$14.35

15 Watt - Slim High Power

Regulated output voltage, small size and higher power output make these AC adaptors suitable for thousands of different applications.

- Input: 100-240VAC 50/60Hz
- Fit side-by-side on a powerboard
 Supplied with 7 plugs
 Safety Approval no. NSW22419

• M	eet MEPS	requiremer	nts	000	6		LIEFR BRARRITU
7	Voltage VDC	Current Amps	Approval Number	Cat.	Qty 1+	Qty 5+	Qty 10+
	5	3.0	NSW22419	MP-3480	\$21.95	\$19.70	\$17.35
	6	2.2	NSW22419	MP-3482	\$21.95	\$19.70	\$17.35
	9	1.7	NSW22419	MP-3484	\$21.95	\$19.70	\$17.35
	12	1.5	NSW22419	MP-3486	\$21.95	\$19.70	\$17.35

Plugs Supplied with Switchmode AC Adaptors The 7 plugs supplied with switchmodes are shown here, and are not



Freecall order hotline: 1800 022 888

25 Watt - Extra High Power

- Input: 100-240VAC 50/60Hz
- Huge output power Supplied with 7 plugs

VDC

12

15

24

Safety Approval no. NSW22824 Meet MEPS requirements

Amps 3.0

2.5

2 0

1.25

Voltage Current



\$26.90

\$26.90

\$23.70

\$23.70

\$29.95

\$29.95

UNREGULATED - FIXED VOLTAGE

5 Watt - Unregulated Ultra-Slim

These super-slimline switchmode AC adaptors give an unregulated DC output, meaning that when loaded below their rated power. they will provide a slightly higher output voltage.

NSW22824 MP-3492

NSW22824 MP-3494

- Input: 100-240VAC, 50/60Hz

- Extra small, will fit side-by-side on a powerboard
 Unregulated output voltage
 Direct replacement for old transformer type AC adaptors
- Supplied with 7 DC plugs Safety approval no. NSW22823 Meets MEPS requirements

		. cqucc					
7	Voltage	Current	Approval	Cat.	Qty 1+	Qty 5+	Qty 10+
	VDC	Amps	Number				
	9	0.55	NSW22823	MP-3280	\$14.95	\$13.35	\$11.70
	12	0.4	NSW22823	MP-3282	\$14.95	\$13.35	\$11.70

MULTI-VOLTAGE

Switchmode Plugpacks with USB Outlets

These switchmode plugpack adaptors are slim in size, lightweight, and feature manually selectable variable voltage outputs. All are MEPS compliant and come supplied with 7 plugs and a USB output socket. (MP-3318 does not include USB socket)

7.2W 3 - 12VDC	Cat. MP-3310	
Input voltage	100 - 240VAC	
Output voltage	3, 4.5, 5, 6, 7.5, 9, 12VDC	
Output current	600mA (max)	
Dimensions	69(L) x 39(W) x 31(H)mm	(a)
12W 3 - 12VDC	Cat. MP-3312	A 3.59
Input voltage	100 - 240VAC	THE PARTY OF THE P
Output voltage	3, 4.5, 5, 6, 7.5, 9, 12VDC	Elite 10
Output current	1000mA (max)	
Dimensions	75(L) x 44(W) x 44(H)mm	A MILE
18W 3 - 12VDC	Cat. MP-3314	No. of the last of
Input voltage	100 - 240VAC	
Output voltage	3, 4.5, 5, 6, 7.5, 9, 12VDC	
Output current	1500mA (max)	-
Dimensions	82(L) x52(W) x 45(H)mm	0
27W 3 - 12VDC	Cat. MP-3316	
7 output plugs	Cat. IVIF-55 TO	1
Input voltage	100 - 240VAC	
Output voltage	3, 4.5, 5, 6, 7.5, 9, 12VDC	
Output current	2250mA (max)	
Dimensions	80(L) x 65(W) x 50(H)mm	
25W 9 - 24VDC Plugpack	Cat. MP-3318	
Input voltage	100 - 240VAC	
Output voltage	9, 12, 13.5, 15VDC @ 1.5A, 18,	
	20VDC @ 1.2A, 24VDC @ 1A	
Dimensions	96(L) x 50(W) x 30(H)mm	LIE HE)

		(=)	- (, (,			WARRANTU
7	Voltage	Approval	Cat.	Qty 1+	Qty 5+	Qty 10+
	VDC	Number				
	3 - 12	NSW24400	MP-3310	\$19.95	\$17.70	\$15.70
	3 - 12	NSW24401	MP-3312	\$24.95	\$22.35	\$19.70
	3 - 12	SAA091002EA	MP-3314	\$29.95	\$26.90	\$23.70
	3 - 12	SAA091002EA	MP-3316	\$34.95	\$31.45	\$27.90
	9 - 24	SAΔ091002FA	MP_3318	\$34.95	\$31.45	\$27.90

Switchmode Mains Adaptor 3 - 13.8VDC 2.5A

Variable desktop power supply with binding post and 7 DC plugs. 1.5 metre lead with interchangeable

Specifications	
Output voltage	3, 5, 6, 9, 12, 13, 8VDC
Output current	2.5A max
Dimensions	140(L) x 80(W) x 42(H)mm

7	Voltage VDC	Approval Number	Cat.	Qty 1+	Qty 5+	Qty 10+
	13.8	 SGSEA/100289	MP-3308	\$39.95	\$35.90	\$31.90

Desktop Mains Adaptors

DESKTOP STYLE

These products meet the requirements of Energy Star, the European Commission Code of Conduct, and of course California's legislation, suppliers of electronic equipment requiring an external power supply can ship their products worldwide without needing to understand the complex new systems.

Green Power Desktop 10W Switchmode Adaptor

Electronic equipment suppliers are now having to get green. Legislation is being introduced in California and Europe which requires external power supplies to comply with minimum energy efficiency requirements. It is no longer possible to sell external power supplies which don't comply with these new "Green Power" requirements. With other regulations coming in around the world, it is only a matter of time before these

This 10W 5VDC adaptor is the first in what we expect will become a series of these power supplies. Meeting the requirements of Energy Star, the European Commission Code of Conduct, and of course California's new legislation, suppliers of electronic equipment requiring an external power supply can ship their products worldwide without needing to understand the complex new systems.

minout necumy to unue	istana are complex new systems	
Specifications		
Input Voltage	100 - 240VAC for worldwide use	
Input Current	0.5A RMS Max	
Input AC Frequency	47 - 63Hz	-0
Input Connection	IEC320 C8 socket	00
Output Voltage	5VDC Regulated	
Output Current	2A	
Output Power Cord	1.8M long terminated with	
' '	2.5mm DC plug (centre positive)	
Power saving state	Under 0.3W	
Dimensions	75.5(L) x 44.5(W) x 26(H)mm	GERR
Electrical Safety Approved	Approval Number: V05226	шаяяялты

7	Approval Number	Cat.	Qty 1+	Qty 5+	Qty 10+
	V05226	MP-3236	\$24.95	\$22.35	\$19.70

60W - 12V, 19VDC & 45W 24VDC

Versatile switchmode power supplies in a range of different configurations. All have high output currents and are low-profile for easy



· Output cable terminated to fixed 2.5mm DC plug except for MP-3243 which includes 5 output plugs

MP-3242/43 = SAA090025EA MP-3246/48 = SAA090329EA

Ϡ Voltage(VDC)	Current(A)	Cat.	Qty 1+	Qty 5+	Qty 10+
12	5	MP-3242	\$59.95	\$53.95	\$47.90
12 (5 plugs)	5	MP-3243	\$64.95	\$58.50	\$51.95
19	3.2	MP-3246	\$59.95	\$53.95	\$47.90
24	1.9	MP-3248	\$59.95	\$53.95	\$47.90

65W - 48VDC

48V power supply specifically designed for power over Ethernet applications.

Specifications					
Voltage	90 - 264VAC				
Output voltage	48V @ 1.35A			. 0	
Power output	65W Max.			1.	
Over voltage protection					unkod
Over current protection	2 step controlled	current source	1	100	
Short circuit protection	Built-in				
Efficiency	85% min. at full I	oad	LIEFF		
Ripple/noise (mVpp)	2%		WARRANTU		
Approval Numbe	r	Cat.	Qty 1+	Qty 5+	Qty 10+
A/12702EA		MP-3249	\$59.95	\$53.95	\$47.90

120W 12VDC 10A Desktop Style Switchmode Power Supply

High current switchmode desktop power supply. Suitable for various power requirements, including large surveillance systems to replace a number of smaller plugpacks. DC splitter cables available separately.

A/1401EA

Output cable terminated to fixed 2.1mm DC plug

Considirations	
Specifications	
Input Voltage	100-240VAC
Output Voltage	12VDC
Output Current	10A
Output Connector	2.1mm DC plug
Output Cable Length	1.2m
Dimensions	174(L) x 72(W) x 44(H)mm
Approval Num	ber Cat.



.,				
Cat.	Qty 1+	Qty 5+	Qty 10+	
MP-3241	\$79.95	\$71.95	\$63.95	

60W - 12VDC 5A

Specifications				
Input	220 - 240VAC			
Output	12VDC @ 5 amps			
Dimensions	160(L) x 85(W) x 40(H)mm			
Input lead lengths	1.2m			
Output lead length	1.8m			
Termination	2 pin connector			
Green LED power indicator				

- Switchmode

Т	TRANSFORMER TYPE AC ADAPTORS						
	N20157	GH-1379	\$29.95	\$26.90			
"	Approval Nulliber	Cat.	Ųty I+	QLy 5 +			

Most adaptors are supplied with seven different plugs which suit most applications. All are Electricity Authority (SAA) approved.



Qty 10+

\$23.70

Plugs Supplied with Adaptors Reversible so you can have centre pin positive or negative by reversing the plug.
2.5mm mini 3.5mm mini 1.3mm DC 2.1mm DC 2.1mm DC 2.1mm DC 2.5mm DC 2.5mm DC 2.5mm DC 3.5mm DC

DC Output - Regulated

12VDC 500mA

- CCD Camera Power Supply Terminates to a 2.1mm ID / 5.5mm OD DC plug, centre positive.

Ϡ Voltage(VDC)	Current(A)	Approval	Cat.	Qty 1+	Qty 5+	Qty 10+
12	0.5	NSW22564	MP-3011	\$19.95	\$17.70	\$15.70

AC Output - Non Regulated SINGLE VOLTAGE

(Regulated AC output in a plugpack is not currently feasible).



Ϡ Voltage(AC) nom	Current(A)	Approval	Cat.	Qty 1+	Qty 5+	Qty 10+
9	1.0	N18616	MP-3027	\$25.85	\$23.35	\$20.70
12	0.5	N14256	MP-3020	\$18.95	\$16.95	\$14.95
12	1.0	NSW23268	MP-3026	\$25.85	\$23.35	\$20.70
12	2.0	N17582	MP-3057	\$29.95	\$26.90	\$23.70
15	1.5	N17582	MP-3059	\$29.95	\$26.90	\$23.70
24*	1.0	N17582	MP-3032	\$24.95	\$22.35	\$19.70

^{*}Stripped and tinned termination

16VAC 1.25 AMP ALARM SUPPLY

Designed for use with many house alarm panels. Supplied with three metres of cable for connection to alarm.

- Dimensions: 55(W) x 90(H) x 60(D)mm.
- Terminated with bare ends.

7	Voltage(AC)	Current(A)	Approval	Cat.	Qty 1+	Qty 5+	Qty 10+
	16	1.25	N17582	MP-3021	\$23.95	\$21.35	\$18.95

AC ADAPTOR PLUGS

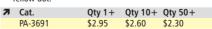
Plugs To Suit AC Adaptors

Suits all our transformer type 240VAC adaptors shown on page opposite.

- 1.7mm ID x 4.0mm OD x 12mm long.

7	Cat.	Qty 1+	Qty 10+	Qty 50+
	PA-3690	\$2.95	\$2.60	\$2.30

- 0.7mm ID x 2.35mm OD x 10mm long.
- · Yellow dot.



- 1.75mm ID x 4.75mm OD x 10mm long.
- Green dot.

7	Cat.	Qty 1+	Qty 10+	Qty 50+
	PA-3692	\$2.95	\$2.60	\$2.30



Laptop Power Supplies - In-Car

TRANSFORMER TYPE AC ADAPTORS (CONTINUED)

17VAC 1.25 AMP WITH EARTH CONNECTED

This has the earth pin wire connected. This is used for alarm panels that have an inbuilt dialler, as Austel require earthing due to it being connected to the telephone system.



· Terminated with bare ends.

7	Voltage(AC) nom	Current(A)	Approval	Cat.	Qty 1+	Qty 5+	Qty 10+
	17	1.25	N17582	MP-3022	\$24.95	\$22.35	\$19.70

2 X 11.5VAC AT 1.25 AMP

Specifications		Aletin i minimu
Input	230 - 240VAC	
Output	2 x 11.5V AC@1.25A	HIHHHHH
Dimensions	140(L) x 80(W) x 75(H)mm	
Input lead lengths	1.8m	
Output lead length	1.8m	The state of the s
Termination	3 Pin DIN connector	and the second

Green LED power indicator

7	Voltage(AC)	Current(A)	Approval	Cat.	Qty 1+	Qty 5+	Qty 10+
	11.5 x 2	1.25	N16680	MP-3055	\$24.95	\$22.35	\$19.70

AC Output

RENEWABLE ENERGY

ш

DILLER

12VAC 12.5 AMP

Enough to run 3 x 50W halogen, or 5 x 20W and one 50W or 7 x 20W.

- · Transformer must be mounted inside.

Output is via screw terminals.			
Specifications			
	12.5 amps.		
Dimensions	145(L) x 87(W) x 88(H)mm.		
Includes	4 holes for easy screw mounting		

7	VAC	Amp	Approval	Cat.	Qty 1+	Qty 5+	Qty 10 +
	12	12.5	N16803	MP-3044	\$49.95	\$44.90	\$39.90

SPECIAL APPLICATION POWER PACKS

Universal Camcorder Power Supply/Charger

With 8 different connectors included to suit all the major brands, this universal camcorder power supply is an excellent choice to replace a damaged or lost original unit, or as a spare to take with you on the road. There is no need to fiddle around with setting the output voltage manually, since the unit automatically sets the output voltage depending on which connector you fit to it - simply match up the right connector and the rest is done for you. Also features a USB output for charging other gadgets such as MP3 players, and has

an LED voltage display to ensure that you have matched the correct connector.

Suits camcorder brands: Sony, Canon, Casio, Fuji, Kodak, Olympus, Nikon, Panasonic, JVC, Samsung



			. ()		
7	Approval Number	Cat.	Qty 1+	Qty 5+	Qty 10+
	A/12702EA	MP-3325	\$59.95	\$53.95	\$47.90

Luxeon® LED **Power Pack**

This 240 volt power pack simplifies the power requirements of Luxeon® LEDs.

An ideal power source for photographic light boxes or decorative applications.

- 6 LEDs for the 1 Watt
- Dimensions: 102 x 21 x 43mm
 Lead lengths 1800mm on the wall
- socket side and 950mm Luxeon side

7 Unit	Voltage	Current	Cat.	Qty 1+	Qty 10+	Qty 25+
1 Watt x	6 20V	350mA	MP-3272	\$27.95	\$24.95	\$22.35

Freecall order hotline: 1800 022 888

ALARM POWER SUPPLIES

16VAC 1.25 Amp Alarm Supply

Designed for use with many house alarm panels. Supplied with three metres of cable for connection

- Dimensions: 55(W) x 90(H) x 60(D)mm
- Terminated with hare ends

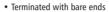
7	Voltage(AC)	Current(A)	Approval	Cat.	Qty 1+	Qty 5+	Qty 10+
	16	1.25	N13057	MP-3021	\$23.95	\$21.35	\$18.95

ACMA

Approved

17VAC 1.25 Amp -**Earth Connected**

This has the earth pin wire connected. This is used for alarm panels that have an inbuilt dialler, as Austel require earthing due to it being connected to the telephone system.



7	Voltage(AC)	Current(A)	Approval	Cat.	Qty 1+	Qty 5+	Qty 10+
	17	1.25	N13057	MP-3022	\$24.95	\$22.35	\$19.70

CAMERA POWER SUPPLY

CCD Camera Power Supply

12VDC 500mA regulated plugpack ideal for

Terminates to a 2.1mm ID / 5.5mm OD DC plug, centre positive.



RELATED PRODUCT

Our range of CCTV & Security Power Supplies can be found in the Security section on page 481

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	MP-3011	\$19.95	\$17.70	\$15.70

IN-CAR LAPTOP POWER SUPPLIES

Keep your laptop or netbook charged on the road. Models to suit most of the mini computers on the market. Check our website for compatibility.

50W - Automatic Cat. MP-3479 Features USB output for charging USB devices.

Specifications	
Input voltage	12VDC
Power output	50W
Output voltages	12-24VDC, 5VDC 1A USB 🎺
Output voltage selection	Automatic
Output current	3A 🦠
Plugs	7
Dimensions	93(L) x 30(W) x 30(H)mm

90W - Automatic Cat MP-332/

30W - Automatic	Cal. IVIF-3324
Specifications	
Input voltage	12VDC
Power output	90W
Output voltages	15 - 24VDC
Output voltage selection	Automatic
Output current	3.75A
Plugs	16
Dimensions	95(I) x 62(W) x 35(H)mm

150W Manual Course

90W

150W

150W - Manuai	Cat. MP-34/2
Specifications	
Input voltage	12VDC
Power output	150W
Output voltages	15, 16, 18, 19, 20, 22, 24VDC
Output voltage selection	Manual
Output current	6A
Plugs	9
Dimensions	115(L) x 60(W) x 35(H)mm

Auto

Manual





\$53.95

\$67.50

Qty 10+

\$27.90 \$47.90

\$59.95

\$59.95

\$74.95

MP-3324

MP-3472

Laptop Power Supplies

MAINS LAPTOP POWER SUPPLIES

Buying an extra power supply saves the hassle of taking the power supply everywhere you take your laptop. Keep one at the office and one at home. The original power supply on your laptop may have failed, so get a replacement at a fraction of the cost of a genuine part. There's a model compatible with most laptops or netbooks on the market. See our website for compatibility charts.

- Manual Type: switch the output voltage to be compatible with your laptop
- Automatic Type: models switch voltage automatically depending on the connector used. Some models display the voltage on a LED or LCD display.
- All models feature short circuit and overload protection.





40W Netbook - Automatic Cat MP-3477 Specifications 110 - 240VAC Input voltage Power output 40W 12 - 24VDC Output voltages Output voltage selection Automatic Output current 172(L) x 69(W) x 40(H)mm Dimensions 70W Heistersol

70W Universal -	Automatic	Cat MP-3320
Specifications		
Input voltage	100 - 240VAC	
Power output	70W	
Output voltages	8.4 - 24VDC	
Output voltage selection	Automatic	
Output current	4A	
Plugs	16	
Dimensions	110(L) x 52(W) x	x 25(H)mm







Specifications		DIE
Input voltage	100-240VAC	
Power output	90W	
Output voltage	19VDC 4.73A (suitable for	
Output voltage	laptops requiring 18-20V)	
Plugs	8	
Dimensions	94(L) x 67(W) x 17(H)mm	

120W Unive	ersal Automatic C	at MP-3328	
Specifications			SIDE
Input voltage	100 - 240VAC		10.55
Output voltage	5V - 24VDC	-	-
Power output	120W		
Output voltages	Automatic		
Output current	8A		
Plugs	13	STOR	THE RESIDENCE OF STREET
Dimensions	141(L) x 63(W) x 32(H)mm	A 16	99966

144W Universal - Manual Cat MP-347

Features USB output for charging USB devices

Specifications					
100 - 240VAC					
144W					
12/14/15/16V @ 8.5A 18V @ 7.7A 18.5/19V @ 7.25A 19.5/20V @ 7A 22V @ 6.5A 24V @ 6A					
USB 5V 1A Manual					
9					
180(L) x 63(W) x 40(H)mm					



150W Universal - Automatic Cat MP-3473

Specifications		\
Input voltage	110 - 240VAC	
Power output	150W	
Output voltages	12 - 20V, 22-24V	-
Output voltage selection	Automatic	
Output current	12 - 20V @ 7.5A 22-24V @ 6.25A	
Plugs	16	· d
Dimensions	158(L) x 63(W) x 37(H)mm	

Suits most models. See website for compatibility.

7	Wattag	je	Type	Cat.	Qty 1+	Qty 4+	Qty 10+
	40W		Auto	MP-3477	\$49.95	\$44.90	\$39.90
	70W		Auto	MP-3320	\$59.95	\$53.95	\$47.90
	90W		Manual	MP-3476	\$69.95	\$62.95	\$55.95
	90W		Auto	MP-3475	\$59.95	\$53.95	\$47.90
	90W	NEW	Auto	MP-3326	\$79.95	\$71.95	\$63.95
	90W	NEW	Auto - Slim	MP-3327	\$79.95	\$71.95	\$63.95
	120W	NEW	Auto	MP-3328	\$129.00	\$115.95	\$102.95
	144W		Manual	MP-3471	\$119.00	\$106.95	\$94.95
	150W		Auto	MP-3473	\$89.00	\$79.95	\$70.95

POWER SUPPLIES FOR MACBOOK®

Power Supplies for MacBook®

Cost effective replacement power supplies for your MacBook® that don't sacrifice quality and reliability. Both use a magnetic connector compatible with the MacBook®, which also has LED indications to show the charge status of the battery. Cable clips foldout to coil the lead around for compact storage and transport.

Specifications	
Input voltage	100 - 240VAC
Power output	60W or 85W
Output voltages	16.5 or 18.5V
Dimensions	126(L) x 55(W) x 31(H)mm
Plug	Magnetic Connector



MacBook® is a registered
trademark of Apple®

Wattage	Voltage	Cat.	Qty 1+	Qty 4+	Qty 10+
60W	16.5V	MP-3330	\$49.95	\$44.90	\$39.90
85W	18.5V	MP-3331	\$49.95	\$44.90	\$39.90

Power Meters & Monitors

MONITOR YOUR POWER & SAVE

Mains Power Meter

This intelligent power meter simply plugs into a normal power point (GPO) and turns it into a real-time power monitoring outlet You can enter the local price of your electricity and the meter will tell you exactly how much the appliance is costing to run. In addition, the power meter tracks the power used and can display the instantaneous voltage or current being drawn as well as the peak levels that have been drawn. The meter has backup batteries so it will not lose the stored data during a blackout or moving from point to point. Simple to install and a valuable tool for monitoring your power consumption.



Cat Qty 10+ MS-6115 \$19 95 \$17.70 \$15.70

Wireless Energy Monitor for Smart Meters

See your household electricity consumption in real time. This meter helps you conserve electricity by showing your usage and costs as you use it. Use the historical records and bar chart analysis to find out how much energy and money you can save. Program the meter with your electricity bills to estimate the usage cost per hour, day, month or any time period you choose. Installation is easy, simply attach the LED sensor to your smart meter, no finding cables to attached clamp sensors to.

Cat.

MS-6164

Monitor Displays

- Current electricity usage and costsEstimated per hour usage and costs
- · Accumulated electricity usage over any time period

Pack includes:

- Wireless energy monitor LED smart meter
- 433MHz Transmitter
- Optical Sensor (500mm cahle)
- Mounting hardware
- 4 x AA batteries

Specifications:

- Wireless transmission: 433.92MHz
- Transmission distance: 30m
- Dimensions: 125(L) x 115(W) x 25(D)mm



Qty 4+

\$119.00 \$106.95



Deluxe Mains Power Meter with CO₂ Measurement

In addition to telling you the cost of electricity consumption of an appliance plugged into it and the amount of power used in kilowatt hours, this deluxe main power meter will tell you how many cumulative kg of CO₂ the appliance is putting into the atmosphere. It makes calculations based on known rates of CO₂ emissions from a typical coal-fired power station. It is a very

effective tool in empowering people to do something about global warming issues.

- Extra large LCD for easy reading
- Battery included
- Dimensions: 120(L) x 58(W) x 40(H)mm

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	MS-6118	\$29.95	\$26.90	\$23.70

Mains Wireless Power Monitor

Monitor and manage your household's electricity consumption simply and easily. With the sensor unit installed in your fuse box, your household power usage data is wirelessly transmitted to the indoor display unit, giving you instantaneous information on the power usage of your whole house. At a glance you can see your household energy consumption and energy costs real time. The indoor LCD receiver unit runs on 2 x AA batteries so you can carry it around with you to see what instant effect turning equipment on and off has, or you can leave it sitting in the supplied wall bracket. Batteries included.



Suitable for single phase only







7	Cat.	Qty 1+	Qty 4+	Qty 10+
	MS-6160	\$79.95	\$71.95	\$63.95



Mains Power Monitor with USB Interface

Qty 10+

Monitor the energy consumption of your entire home and see just how much electricity your appliances use. A transmitter and sensor unit is installed into your meter box, and wirelessly transmits your power usage data to the indoor display unit, which displays real time power, cost and CO₂ emissions as well as daily high and low usage readings, and monthly and yearly totals. With the real time power display, you can see the effect of turning off individual appliances that sit in standby (such as TVs, HiFi, computers), and work out just how of an effect that has on your power bills! The unit stores up to 2 years of data, which can be downloaded via USB to your computer for further analysis to help you really scrutinise and save on power bills.

As they say, the greenest watt is the one sayed. It's also the cheapest!

- Uses 433MHz to wirelessly transmit data
- Transmitter is battery operated (2xD, included)
 Display unit uses mains adaptor
- Display can also use 3 x AAA batteries for short periods
- Displays power, cost, CO₂ and temperature
 Works on single and 3-phase systems (3-phase requires additional sensor pack, MS-6166)





7	Cat.	Qty 1+	Qty 4+	Qty 10+
	MS-6165	\$119.00	\$106.95	\$94.95
	MS-6166	\$29.95	\$26.90	\$23.70

Grid-Connect Solar Power Monitor with USB interface

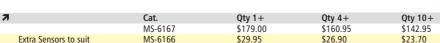
Anyone who has invested in a grid-connected solar power system on their property would of course want to know just how much solar power they are producing, and how much that is going to reduce their power bills. This grid-connect solar power monitor measures the power consumption of your home, the power being produced by your solar array, and also gives you a "balance" of the power you are consuming versus what your solar array is producing. It also displays the costs, with 3 tariffs for the electricity pulled from the grid, and a feed-in tariff for your solar production. Of course you also get a "net cost" that deducts the solar feed-in tariff amount from the electricity you pulled from the grid. Two wireless transmitters sit inside your meter box with attached sensors (one for your home circuits, and one for your solar inverter output) that wirelessly transmit the power information to the indoor display unit. The indoor display shows up all the relevant information on the large LCD display, with programming and options controlled by the front panel buttons. For those who want to get a little deeper into their solar power production and household consumption habits, you can connect the indoor display unit to your PC or laptop, and download the historical data (software available on the Watts Clever website). The wireless transmitters are powered by 2xC batteries each, whilst indoor display is powered by the included 240V AC adaptor with 3xAAA batteries for backup power.

NOTE: Only works with NET-METER grid-connect solar systems.

- Uses 433MHz to wirelessly transmit data
- Sensor current: up to 100Å, 0.1A sensitivity
- Transmitters battery operated (4xC included), last for over 2 years Display unit uses mains adaptor
- Display can also use 3 x AAA batteries for short periods (not supplied)
- Displays solar power, household power, costs, overall power and costs
- Stores up to 2 years of data

 Cost can be calculated using up to 3 tariff rates, plus 1 feed-in tariff

 Clock, temperature, battery level and channel displayed
- Works on single and 3-phase systems (3-phase requires additional sensor pack, MS-6166)









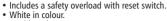
Powerboards & Mains Filters

POWERBOARDS

4 & 6 Way Powerboard

These powerboards will allow 4 or 6 appliances to be plugged in at once to a single power point.

Maximum load is 2400 watts.



Cord length 1.2 metre. Power LED indicator



7		Approval Number	Cat.	Qty 1+	Qty 4+	Qty 10+
	4 Way	V03474	MS-4040	\$5.95	\$5.25	\$4.95
	6 Way	V03474	MS-4045	\$7.95	\$6.95	\$6.75

4 & 6 Way Powerboards with Filters/ Surge and Overload Protection

These powerboards offer a choice of 4 or 6 outlets, all filtered and surge protected. Guard your expensive Hi-Fi, TV, or VCR etc. against damage.

Surge and spike protected

- mains outlets • 10 Amp resettable overload circuit breaker
- Cable length: 1 metre

Specifications	
Surge Protection	Metal Oxide Varistors
Supply Voltage	230-240VAC
Current rating	10A max
Energy Absorption	230 Joules

Colour. Write						
7		Approval Number	Cat.	Qty 1+	Qty 4+	Qty 10+
	4 Way	V03045	MS-4051	\$9.95	\$8.75	\$8.25
	6 Way	V03045	MS-4055	\$14.95	\$13.35	\$12.70

See our Digital Timers on page 355.

Metal oxide varistors

230-240VΔ0 10A max

Active - Neutral 6000A

430pF

4 Way Powerboard with Filter / Surge and Overload Protection

This powerboard offers 4 outlets, all filtered and surge protected. Guard your expensive Hi-Fi, TV, or VCR etc



Features:

- 4 Surge and Spike protected mains outlets
- 10 amp resettable overload circuit breaker
- Power on indicator in switch
- Cable length: 1 metre
 Colour: White (MS-4050),

or black (MS-4057)			umber: N17			
	7	Approval Number	Cat.	Qty 1+	Qty 4+	Qty 10+
	4 Way White	NSW17298	MS-4050	\$14.95	\$13.35	\$11.70
	4 Way Black	NSW17298	MS-4057	\$14.95	\$13.35	\$11.70

Surge Protection

Supply Voltage Current Rating

Protection Mode

Max Surge Current Typical Capacitance

Clamping Voltage

4 & 6 Way Surge/Overload Protected Powerboards

Individually switched powerboards provide a high level of protection from overload and surge, with extra-wide spacing to take bulky mains plugpacks. Ideal for home theatre, computers, TV and video or audio systems.



- Extra-wide spacing to take mains plugpacks
- Individually switched
- Surge and overload protected

Two versions available: 4 Way - Cat MS-4064 6 Way - Cat MS-4066

7

Specifications - Power Filter				
Surge protection	Metal oxide varistors			
Supply voltage	230-240VAC			
Current rating	10A max			
Surge Rating	375 Joule			
J. J.				



		Cat.	Qty 1+	Qty 4+	Qty 10+
4 Way	SGSEA090140	MS-4064	\$19.95	\$17.70	\$16.70
6 Way	SGSEA090140	MS-4066	\$24.95	\$22.35	\$20.95

6 Way Power Outlet with Mains Filter & Telephone Line Protection

This mains filter has protection for mains and telephone products: phones, modems, answering machines, cordless telephones, faxes.

- Ideal for protecting your computer and phone line from spikes and surges.
 6 surge and spike protected mains outlets
- Telephone / data line surge and spike protection RJ45 sockets (RJ12 reducer included)
- 10 amp resettable overload circuit breaker
- · Flame retardant enclosure
- Available in Black



Specifications - Pov	Specification	
Surge protection	Metal oxide varistors	Filter type
Supply voltage	230-240VAC	Max impulse
Current rating	10A max	breakdown vo
Protection mode	PN, NE, PE	Max impulse
Max surge current	30,000A	discharge curr
Typical capacitance	400pF	Maximum cap
Clamping voltage	<775V(@50A)	
Energy absorbtion	875 joules	
Response time	<20µSec	

Specifications - relepn	
Filter type	Gas tube arrestor
Max impulse breakdown voltage	1,000V
Max impulse discharge current	10,000A
Maximum capacitance	20pf



7 A	pproval Number	Cat.	Qty 1+	Qty 4+	Qty 10+
6 Way N	18812	MS-4037	\$29.95	\$26.90	\$23.70

RACKMOUNT POWER DISTRIBUTION UNITS

Rack-Mount 6 IEC Power Distribution Unit

Power up to six components in your rack setup. The board has 6 IEC outlets and mounting brackets at 90° so it can be mounted vertically or horizontally depending on your setup. Don't trust the unclean power you get in most venues. Give your expensive gear all the protection and filtering it needs.

 Overload and surge protected



 Fuse protected 10A input

• 6 x IEC outlets • Dimensions: 482(W) x 46(H) x 46(D)mm





MS-4090 \$59.95

6 Way PDU with Surge & Overload Protection

Power up to six components in your rack setup. The board has 6 conventional 240V outlets and fits any standard 19" rack. It actually takes a little more than one rack unit, but mounts on 1U centres.

• 1U rack space Overload protected



 Surge Protection • 10A input • Lead length: 1.6m

• Dimensions: 482(W) x 46(H) x 46(D)mm





POWERBOARDS (CONTINUED)

Smart Powerboard with Energy Meter



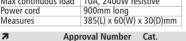
This 6 way powerboard is perfect for saving on standby power consumption. As you know, many devices have a "standby" power usage even when turned off, which can only be eliminated by turning the device off at the power point. There is one outlet that is always on. A second outlet is the "smart" outlet, and the remaining four outlets are the "green" outlets. When the device plugged into the "smart" outlet is switched off, the smart powerboard will kill power to the four "green" outlets, eliminating their standby power usage. This is perfect for a home theatre system, home office or computer. Coupled to this, the powerboard also features an energy meter that tells you the energy consumption of the devices plugged into the smart powerboard; in watts, cents per hour or CO₂ kg per hour. Display is for both cumulative and time elapsed. Also features surge protection, overload, spike and noise filtering. Settings and data saved during power failure.

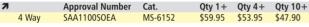
RENEWABLE ENERGY

坦

- Automatic ON/OFF Switch
- Energy meter w/CO₂

Specifications	
Power consumption	<1kW
Max current	19,500A, 630 joules
Max continuous load	10A, 2400W resistive
Power cord	900mm long
Measures	385(L) x 60(W) x 30(D)mm





4 Outlet Remote Control Powerboard



them into the powerboard as normal, then use the remote to turn each device on or off. This makes it much easier to turn off devices like hi-fi or home theatre components as they tend to be inaccessible and behind cabinets. It will also save you money on your power bill. Each remote is coded to avoid interference.

- One-touch synchronisation
- Overload circuit-breaker protection Surge and spike protection
- LED power indicator
- Can be coded with up to 5 different remotes
- Each outlet switched individually
- Not suitable for use with UPS or Inverters (modified or sine wave)

Specifications					
Control frequency	y 433.92MHz				
Range	50m				
Load rating	10A, 2400W				A
Dimensions	150(L) x 80(W) x 35(H)mm			шина
7	Approval Number	Cat.	Qty 1+	Qty 4+	Qty
4 Way	V07950	MS-6150	\$59.95	\$53.95	\$50

6 Way Power Outlets with Mains Filter & Telephone Line Protection

This filter features recessed mains safety sockets that are perfectly suited to plugpack adaptors. Each socket is spaced apart so that plug packs can be used in every socket if required (this is near impossible with conventional powerboards). When a standard powerboard is mounted vertically, plug packs can sometimes work themselves free over time. The recessed sockets on this board prevent that from happening and, of course, from making potentially dangerous contact due to partially exposed mains connectors.

Specifications - Telephone Line Protection

Specifications	
Power rating	230-240VAC 50Hz
Current	10A (max.)
Handling	2400W
Protection mode	A-N, A-E, N-E
Surge current	6,000A (2/20u sec.)
Clamping voltage	<775V (at 50V)
Energy absorption	175J (10/1000u sec.)

vou can fit bulky AC plug packs along side each other

N18323

N18322

Single Row

Double Row

Approval Number

ver rating 230-240VAC 50Hz rent 10A (max.)		Filter type	Ceramic Gas
	10A (max.)		Discharge tube
dling	2400W	Surge current	1200A (1kV/u sec.)
ection mode	A-N, A-E, N-E		Line to Line
ge current	6,000A (2/20u sec.)	Impulse discharge current	10kA (8/20u sec.)
nping voltage <775V (at 50V)		Capacitance	<5pF
rgy absorption 175J (10/1000u sec.)) Clamping voltage	600V
		Phone socket	RJ-45 with reducers
			for RJ-12
		Surge protection	Metal oxide varistors
CH TIP		Response time	<15 nanosecond
DOTH HINITS	feature wide	Differential capacitance	400pF (1kHz)
		Filtration protection	EMI/RFI
spaceo maii	ns sockets so		





\$39.95

\$35.90

\$31.90

The board also features telephone line filtering for modems/faxes, and separate LED surge and power indicators. Each mains socket is individually switched with illuminated rocker switches for quick reference, eliminating the annoyance of having to unplug an item that doesn't have it's own mains switch, such as plugpack-powered multimedia speakers, for example. Naturally, the mains filter includes overload protection as well as a circuit breaker.

Cat. MS-4022

• Safety approval no. N18323

Safety approval no. N18322





Close up of protection input/output sockets







Power Tower - 8 Way Vertical Powerboard with USB Charging

MS-4020

Not only does this vertical power board have excellent safety and surge protection characteristics but it also looks great and has a huge list of added features. With the convenience of the two built in USB ports to charge any USB product including ever demanding items such as smart phones, iPhone® and iPad®, you can do away with additional adaptors for a start. Also features 8 surge protected sockets, power overload protection, and when it's not in use simply store the power cord in the bottom of base. Perfect for under the desk or behind your entertainment unit.

Specifications	
Surge protection	Metal oxide varistors
Supply voltage	230-240VAC, 10A, 2400W max
Protection mode	A-N, N-E, E-A
Max surge current	90,000A
Energy absorption (Joules)	3150J
Clamping voltage	775V
Response time	10/1000us
Noise Filter	150kHz - 100MHz up to 75dB
2 x USB Recharging ports	1A max
Dimensions	225(H) x 170(W) x 170(D)mm

Approval Number SAA111762 EA MS-4023

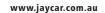








Note: iPhone® and cable not included



Freecall order hotline: 1800 022 888

Powerboards & Mains Filters

neutral like cheaper models. Further protection is provided by the built-in circuit

breaker. Not stopping there, this powerboard also has USB outputs, data protection for

a network connection, satellite / cable TV video protection, and protection for the TV

POWERBOARDS (CONTINUED)

Home Theatre Powerboard with Mains Filter, Telephone, Video, & TV Protection

Designed specifically for use in the lounge room or home theatre, this powerboard gives you the protection you need for your home theatre equipment. Surge protection and filtering are provided for the mains power to all your equipment, sach socket is protected three ways through active, neutral and earth; not simply across active and

Now includes 2 USB ports to power your USB devices. 1A output from each output.

- · 8 surge and spike protected outputs
- Telephone and data line surge and spike protection.
 RJ45 sockets for data and telephone.
- 10 amp resettable overload circuit breaker

- Flame retardant enclosure with protection neon indicators
 Recessed power switch to help avoid accidental power on or off
 Two outlets spaced further apart to accommodate bulky AC adaptors
- USB charging output: 2.1A total

Specifications - Power Filte	er
Surge protection	Metal oxide varistors
Supply voltage	230-240VAC
Current rating	10A Max
Protection mode	A-N, N-E, E-A
Max Surge current	52,000A
Typical capacitance	400pF
Clamping voltage (@50A)	<775V
Energy absorption	1550 Joules
Response time	< 20us

Antenna Protection:

Filter type: gas arrestor tube

Specifications - Data Line	
Filter type	Gas arrestor tube
Surge current	1200A (1kV/u sec)
Impulse discharge current	10kA (8/20u sec)
Capacitance	<5pF
Clamping voltage	6001/

Leads included

- 1.8m TV coax plug to TV coax plug
- 1.8m RJ45 to RJ45
- 1.8m RJ45 to RJ12 1.8m F61 plug to F61 plug Approval No. N17817

Now with USB Charging sockets



7	Туре	Approval Number	Cat.	Qty 1+	Qty 4+	Qty 10+
	8 Way	N17817	MS-4024	\$49.95	\$44.90	\$39.90



8 Way High End Powerboard with Surge Protection

Ideal for home theatre, recording studio or any other application where you have high-end gear connected. Surge protection and EMI/RFI filtering are provided for the mains power to all your equipment and each socket is protected three ways: through active, neutral and earth.

Additional protection is provided by the built-in circuit breaker. This powerboard also has telephone protection (1 input, two outputs so doubles as a splitter), data protection for a network connection, satellite / cable TV video protection, and protection for the TV antenna.

- 8 surge and spike protected outputs
- Separate telephone/data line and TV antenna/cable TV surge and spike protection
- 10 amp resettable overload circuit breaker
- · Flame retardant enclosure
- Protection neon indicators
- Recessed power switchTwo outlets spaced further apart to accept plugpacks
- TV Surge Protection: Gas tube arrestor
 DC Strike Voltage: 230 to max. 600 volts
 Surge current: 4500A
- Energy Dissipation: 225 joules
 Response Time: <10ns

Specifications - Power Filter			
Surge protection	Metal oxide varistors		
Supply voltage	230-240V		
Current rating	10A max. 2400 watt		
Protection mode	A-N, N-E, E-A		
Max surge current	144,000A		
Typical capacitance	400pF		
Clamping voltage (@50A)	<775V		
Energy absorption	4300 joules		
Response time	< 2 ns		
Filtration	EMI /RFI		

Specifications - Telephone Line Protection				
Filter type	Gas tube arrestor			
Surge current	1200A (1kV/μs)			
Impulse discharge current	10kA (8/20µs)			
Capacitance	<5pF			
Clamping voltage	600V			

Leads included

1.8m TV coax plug to TV coax plug

1.8m RJ45 to RJ45

1.8m RJ45 to RJ12

1.8m F61 plug to F61 plug

7	Туре	Approval Number	Cat.	Qty 1+	Qty 4+	Qty 10+	
	8 Way	N18812	MS_4020	¢70 05	¢71 Q5	\$63.05	

MAINS EXTENSION LEADS & ADAPTORS

Mains Extension Leads - White

These leads have the new "safe socket", which has a flange around it, so kids can't slide a knife in and hurt themselves







Mains Extension Leads - Black

Perfect for stage, lighting, DJ or other applications where the inconspicuousness of a black extension lead is required Rated to 10A max.







7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	2 metres	PS-4122	\$5.95	\$5.25	\$4.75
	3 metres	PS-4125	\$8.95	\$7.95	\$6.95
	5 metres	PS-4130	\$9.95	\$8.75	\$7.75
	10 metres	PS-4134	\$15.95	\$14.35	\$12.70

7	Cat.	Qty 1+	Qty 4+	Qty 10+
2 metres	PS-4152	\$5.95	\$5.25	\$4.75
5 metres	PS-4155	\$9.95	\$8.75	\$7.75
10 metres	PS-4157	\$14.95	\$13.35	\$11.70

Mains Surge Protectors

Mains surge protectors are a must for protecting valuable equipment against damage. Unknown to the majority of consumers, the voltage coming out of the power point can and will fluctuate daily, even without major occurrences like lightning strikes. These two mains surge protectors alleviate the majority of problems caused by these increases in voltage which damage delicate and expensive appliances connected to vour power outlets.

Each model has protection across active-neutral and active-earth and is fully approved for electrical safety. Providing adequate protection against most surges in mains voltages, they can save you many times the cost of these units in repairs or insurance claims.

Two models available:

MS-4015 - Double Power Outlet Protection

• MS-4017 - Single Power Outlet Protection and Phone Protection



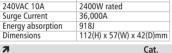
Specifications	MS-4015		MS-4017	
Load rating	240VAC 50H	z 10A	240VAC 50H	Iz 10A
Energy absorption	175J		175J	
Surge current	6000A		6000A	
Max impulse breakdown voltage			1kV	
Max impulse discharge current			10kA	
7	Cat.	Qty 1+	Qty 4+	Qty 10+
Double Power Point	MS-4015	\$10.95	\$9.75	\$8.75

Rotating Surge Protector with 2 x USB Outputs

Single Power Point & Phone MS-4017

More than your average surge protector, it features a 90° rotating design for easy GPO switch access and 2 USB charging ports as well as the surge protection being greater than many powerboards. The USB outputs provide 2.1A (total) for fast charging for your iPad®, iPhone®, iPod® or other power hungry devices without wasting another power point. This compact unit also has attractive illuminated indicators showing that power and surge protection are operating.

Specifications	
USB Ports	2.1A total
240VAC 10A	2400W rated
Surge Current	36,000A
Energy absorption	918J
Dimensions	112(H) x 57(W) x 42(D)mm



Qty 10+ MS-4027

Single RCD (Safety Switch) Outlet

RCDs (residual current devices), also commonly called safety switches, are designed to cut the power in a fraction of a second in the event of a fault condition, thereby preventing electrocution. The electrics in your house may be too old to have RCDs installed, or you might want to use a power tool outdoors on an outlet that doesn't have an RCD fitted - use this handy portable one instead. Buy one right now if you don't have RCDs already

Note: RCDs are not a substitute for common sense around mains electricity. While they will work in most situations, they may not in some cases and are not a substitute for current overload devices such as fuses and circuit breakers. Wiring, appliances, leads and power outlets must always be maintained in a safe condition.

- Test function

RENEWABLE ENERGY

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Reset button10A 240V rated

7	Cat.	Qty 1+	Qty 4+	Qty 10+
10A 240VAC	MS-4013	\$27.95	\$24.95	\$22.35

MAINS OUTLET CONTROL & PROTECTION

Footswitch Operated Mains Outlet Some powerpoints are very inconvenient to get to -

you have to crawl under tables or behind furniture to get to them. Solve the problem easily by operating them with this convenient footswitch. Simply connect any mains operated device to the GPO and turn it on or off remotely from up to 2.8m away. Ideal for the elderly or disabled



Freecall order hotline: 1800 022 888

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	MS-6144	\$29.95	\$26.90	\$23.70

Mains Standby Power Saver with IR Receiver

Save on energy bills, reduce your carbon footprint and prolong the lifespan of your electricals. This energy saving device eliminates the needless power consumed by your appliances when they are in standby or idle mode. With your appliances plugged into this unit, once it detects that they are in standby mode, it will switch them off completely after a short delay. The easy-program infrared receiver will read your remote signals, so switching all your appliances on again is as simple as pressing the on button on the remote control for your TV, DVD, or home theatre system. Saving energy has never been this easy.

• Dimensions: 128(H) x 65(W) x 40(D)mm



IR Controlled Wireless Mains Sockets

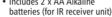
These IR controlled wireless mains sockets allow you to turn the power to your appliances or equipment ON or OFF by using an otherwise unused button on an existing remote control. Simply program the sockets and assign them to whatever unsued button you want on your TV or other remote control to turn the sockets ON and OFF - no need for yet ANOTHER remote control! Allows multiple sockets to be controlled from the one button or assign one button per socket; it's entirely up to you. Includes IR receiver units and 2 wireless mains sockets, extra sockets are available separately with a maximum of 200 sockets per IR receiver unit.

Up to 20m range10A, 2400W rated

MS-4017

\$16.95 \$14.95 \$13.35

- Frequency: 433MHz Includes 2 x AA Alkaline









Spare Wireless Mains Socket MS-6157

7		Cat.	Qty 1+	Qty 4+	Qty 10+
	IR Controlled Mains Socket	MS-6158	\$39.95	\$35.90	\$31.90
	Spare Mains Socket	MS-6157	\$14.95	\$13.35	\$11.70

Wireless 3 Outlet Mains Controller

Simply plug in any mains appliance rated up to 10A and use the remote to turn each one on or off individually, or control all of them together. One of the outlets also has an LED night light that's also operated with the remote, so you can see where you're going if you have to get up during the night for the elderly, disabled or for making sure the TV other appliances are turned off at the mains before you go to bed.

433MHz

MS-6143

- · Remote battery included
- 10A, 2400W rated
- Remote measures: 125(W) x 45(H) x 17(D)mm



MAINS OUTLET/LIGHT WITH REMOTE Cat MS-6145

















7		Cat.	Qty 1+	Qty 4+	Qty 10+
	Wireless 3 Outlet Mains Controller	MS-6142	\$44.95	\$40.45	\$35.90
	Spare Mains Outlet with Light	MS-6143	\$17.95	\$15.95	\$14.35
	Mains Outlet/Light with Remote	MS-6145	\$24.95	\$22.35	\$19.70

DO A FRIEND A FAVOUR

to catalogue@jaycar.com

If you have a technical friend or someone who may be just interested in some of the products we stock, simply mail or email his or her address to: **Catalogue Department** Jaycar Electronics: PO Box 107 Rydalmere, NSW 2116 or email



Mains Timers & Adaptors

MAINS OUTLET TIMERS

Mains Timer with LCD

Mains timers have been common in households for many years but most are of low quality and lacking in features for more advanced timing. Our model is manufactured from quality components to provide long term reliable service and 100% electrical safety approved so you can use it with confidence. Featuring 8 on/off programmes across 16 combinations of days or blocks of days for unrivalled flexibility. In addition there is a random function which will turn devices on and off at unspecified times of the day and a one touch "summertime" button to easily convert to daylight saving time when it arrives. Internally this unit has a switching contact rated at 30 amps, not 10 amps like the cheap ones from the hardware store. While you cannot connect a load exceeding 10 Amps to this unit, it does allow you to use it with electrical items with high start-ups like HID lighting ballasts which destroy cheap units.

· Great for indoor gardening, hydroponics,

security lighting and	much more.	TECH	19.08
Specifications	MS-6110		
Voltage	220-240VAC 50Hz		
Switching contact	30 amp Internal		
Max load	10A, 2400W		
Operating temperature	-10 ~ +40° C		
Operating modes	12 or 24 hour		11
Min setting time	1 minute		
Accuracy	+/- 1 minute per month		1
Battery backup	+/- 1 minute per month Ni-MH 1.2V providing > 100 hours	LIEFIR	

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	MS-6110	\$25.95	\$23.35	\$20.70

24 Hour Mechanical Mains Timer

Control any 240V mains appliance rated up to 10A. Turn the heater on before you get up in winter, turn the lights on or off when you're out or control a watering system. Simply rotate the dial to the time you want, then switch it on.

- Suits any 240V 10A GPO.
- Dimensions: 120(H) x 76(W) x 50(D)mm



Brand New

Improved Model

For more Mains Power Meters & Monitors

see page 350

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	MS-6112	\$9.95	\$8.75	\$7.75

Digital Mains Timer Switch Modules

Ideal for automating your heating & lighting or practically any other switching application that requires multiple unattended switching cycles. The timer has eight on/off settings that can be programmed to function on any day, or combinations of days across the week. Each of the on/off settings can be set independently. Each On/Off setting can be associated with a range of days from a single day to every day, thus giving 56 possible on/off cycles per week. Two models available.



Cat AA-0362

7		Cat.	Qty 1+	Qty 4+	Qty 10+
	16A 12VDC	AA-0361	\$49.95	\$44.90	\$39.90
	30A 240VAC	AA-0362	\$49.95	\$44.90	\$39.90

TESTER

Cat AA-0361

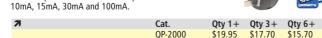
Power Point & Leakage Tester

Test your power points using this versatile tester. It checks most types of power points within 110V to 240V range for correct wiring and trip levels for earth leakage circuit breakers

The combination of lights on the front panel identifies the following problems:

- . No earth connected
- No neutral connected
- · No active connected
- Active and neutral reversed Active and earth reversed

To determine ELCB trip levels simply slide the switch from 10mA up toward 100mA. All ELCBs should trip before 100mA. Switch positions are



MAINS ADAPTORS

Mains Double Adaptors

- 240V Double Adaptors
- Standard, right & left types



7		Approval Number	Cat.	Qty 1+	Qty 4+	Qty 10+
	Standard	N14532	PP-4032	\$4.95	\$4.45	\$3.90
	Right Hand	N19006	PP-4035	\$4.95	\$4.45	\$3.90
	Left Hand	N19006	PP-4036	\$4.95	\$4.45	\$3.90

Mains Adaptor with 2 x USB Ports

Charge USB devices without wasting a powerpoint. Simply leave it plugged in and still have access for using a mains appliance. Ideal for the business traveller - ever seen a hotel room with too many power points?

Dimensions: 88(H) x 44(W) x 33(D)mm



7	Approval Number	Cat.	Qty 1+	Qty 4+	Qty 10+
	SAA110634EA	PP-4038	\$12.95	\$11.35	\$10.35

Double Adaptor with Night Light

Leave a night light on for the kids without wasting a power point. When the lights go out, the light comes on so you can find your way to the little room or the kitchen for a midnight snack and it only uses a tiny 0.2W so it won't send the power bill through the roof. It can be left in place and you still have use of the power outlet.

- · Light-sensitive
- Dimensions: 88(H) x 44(W) x 33(D)mm

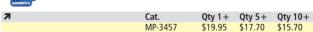
7	Approval Number	Cat.	Qty 1+	Qty 4+	Qty 10+
	SAA101507EA	PP-4039	\$9.95	\$8.75	\$7.75

Mains Power Adaptor for iPad®/iPhone®/iPod®

Mains power adaptor suitable for charging Apple® products including iPad®

- Includes 1m USB charging/sync cable
- Input: 240VAC 50Hz
- Output: 5VDC, 2.1A





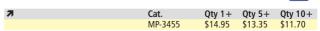
USB Mini Power Adaptor - 1A

A simple solution to your USB power needs in a conveniently small package. With 5VDC output at 1.0A, this little AC power adaptor has enough grunt to charge pretty much any mobile phone or USB device, including all iPods® and iPhone® models. Also features worldwide voltage input making it

Specifications	
USB	Socket A
Input voltage	100-240VAC, 50/60Hz
Output	5VDC, 1.0A
Dimensions	40(dia) x 27(L)mm

at for travellers. Just connect your USB charging ble (not included) and away you go.			
ecifications			
В	Socket A		
out voltage	100-240VAC, 50/60Hz		
itput	5VDC, 1.0A		





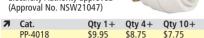


TRAVEL ADAPTORS

Note: These adaptors do not convert voltage. Item being connected must be suitable for 220-240VAC

Earthed Adaptors for use in Australia & NZ with Surge Protection

Accepts overseas 2 and 3 pin plugs and adapts to Australia and New Zealand. For use with electrical appliances from Europe, USA, and some Asian and South American countries. Surge protected to provide additional safety. Flectricity Authority approved



\$9.95

\$8.75

Accepts overseas 2 and 3 pin plugs and adapts to Australia and New Zealand plug configuration. This unit includes a surge protector to keep your device safe from voltage spikes. For electrical appliances from many countries including USA, Asia, Japan etc.

 Does not convert voltage · Electricity Authority Approved.

(Approvál No. NSW21046)

Qty 1+ Qty 4+ PP-4019 \$9.95 \$8.75 \$7.75

For use by visitors from all over the world (except South Africa & India).



USB Mains Travel Adaptor for iPad®/iPhone®/iPod®

Cat Qty 4+ Qty 10+ PP-4020 \$15.95 \$14.35 \$12.70

4 interchangeable plugs; suitable for UK, Europe, USA, China and Australia with a worldwide operating voltage of 100-240V. Also features overload

Mains Adaptor Unearthed for USA or Japan

This travel adaptor is designed for use on 2 pin Australian appliances while travelling in Japan or the USA

Only suitable for items without an earth pin such as most mobile phone chargers and laptop power supplies.

Cat. Qty 1+ Qty 4+ PP-4026 \$12.95 \$11.35

Earthed Mains Adaptor for Use in Australia and New Zealand

This universal adaptor converts 3 pin plugs from USA or UK to match 3 pin outlets in Australian and New Zealand. Also compatible with the unearthed 2 pin Europlug common throughout Europe. As the adaptor DOES NOT convert voltage the item being connected must be suitable for 220-240VAC

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	PP-4027	\$9.95	\$8.75	\$7.75

Mains Adaptors for Australia & NZ Going Overseas

They DO NOT convert voltage, but allow you to plug into various types of wall outlets around the world.



	(EARTHED)			
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	PP-4025	\$12.95	\$11.35	\$10.35
UR	OPE	Approval Numb N19887	oer:	1



GREAT BRITAIN Approval Number N19893



Otv 4+ Otv 10+ \$11.35

JAYCAR SPECIALS

Look out for our monthly promotions in store now!

240 - 115V ISOLATED STEPDOWN TRANSFORMERS

Quality fully-enclosed stepdown transformer with fold up metal carry handles, approved 3 wire power cord & US style 2 pin 110 - 115V socket.

· Electrically isolated between primary and secondary

Isolated Stepdown Transformers

- Protective earth carried through to output
 Useable with precision electric & electronic appliances. Compact, excellent, safe & robust construction - steel case
- DO NOT compare these to cheap, non isolated units. Your life is too precious!

Includes a resettable circuit breaker instead of fuse. Now you are not tempted to replace the fuse with a piece of coathanger wire.

This compact USB outlet charger is a lightweight and practical unit for charging your Apple® products on the go. Ideal for all your USB powered gadgets such as an iPod®/iPhone®/iPad®, PDAs, mobile phones and digital cameras etc. Supplied with USB charge/sync lead and

Specifications				
Rating	120VA (watts) 1.0 amp			
Dimensions	125(W) x 74(D) x 90(H)mm			
Weight	2.4kgs			

120 Watt 240 - 115V Isolated

Cat. MF-1080

• Input voltage: 100V-240VAC, 50/60Hz Output voltage: 5VDC, 2.1A
Dimensions: 53(L) x 53(H) x 26(W)mm

and short circuit protection.

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	MP-3458	\$29.95	\$26.90	\$23.70

250 Watt 240 - 115V Isolated

Specification 250VA (watts) 2.2 amps Dimensions 133(W) x 81(D) x 98(H)mm Weight 3.2kgs

Cat. MF-1082

500 Watt 240 - 115V Isolated

Specificatio	ns
Rating	500VA (watts) 4.2 amps
Dimensions	158(W) x 100(D) x 120(H)mm
Weight	6kgs

Cat. MF-1084

1000 Watt 240 - 115V Isolated

Specificatio	ns
Rating	1000VA 8.6 amp
Dimensions	195(L) x 120(W) x 140(H)mm
Weight	11kg

All other details are similar to our other units.

Due to heavy weight (11kgs) please check for freight costs. Cat. MF-1086



7	Cat.	Qty 1+	Qty 2+	Qty 4+
120W 240 - 115V	MF-1080	\$99.00	\$88.95	\$78.95
250W 240 - 115V	MF-1082	\$129.00	\$115.95	\$102.95
500W 240 - 115V	MF-1084	\$229.00	\$209.00	\$182.95
1000W 240 - 115V	MF-1086	\$369.00	\$335.00	\$299.00

240 - 115V STEPDOWN TRANSFORMERS

RENEMBBLE ENERGY

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STEPDOWN TRANSFORMERS

A WORD ON ISOLATION. This means that:

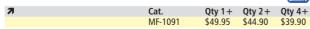
The primary (240V) & secondary (115V) are totally electrically isolated (Dieletric isolation). This is the safest way of making a mains voltage conversion. We recommend this type of transformer whenever the application is medical or medically related or where the secondary equipment is to be operated in or near water or high moisture environments

Note the 240V earth is carried through to the 115V socket earth. As a further safety measure we now supply the ISOLATED units with resettable circuit breakers.

50 Watt - 240VAC to 115VAC

Includes overheat protection. If the unit gets too hot, the thermal fuse will open, then close after unit cools down, restoring operation. Two pin US socket on unit for 110V appliance and cord plug for 240V power.

- 50 Watts.
- This is not dielectrically isolated. (auto transformer type)
- · Not for use in wet areas



Freecall order hotline: 1800 022 888

MAINS HARDWARE

Mains Wall-Mount Light Switches

These light switches are the complement to our range of GPOs, featuring the same attractive finish, high quality materials and low price. The switches are built to last for hundreds of thousands of uses, so you can confidently install them knowing you will get years of service life.

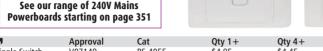
They are all fully approved to Australia/New Zealand safety standards, so you don't just have to take our word to ensure quality.

- Safety Approval No.: V07149
- Packaged in a handy trade-style polybag

Two different types available:

RELATED PRODUCT

See our range of 240V Mains







Note: the screws

included with these have

a slightly different pitch to the standard 3.5 x

plasterboard mounting

0.8mm, but should still fit

7	Approval	Cat	Qty 1+	Qty 4+	Qty 10+
Single Switch	V07149	PS-4055	\$4.95	\$4.45	\$3.90
Double Switch	V07149	PS-4057	\$5.95	\$5.25	\$4.75

GENERAL PURPOSE OUTLETS - GPOs• Safety Approval No.: V07296

- Packaged in a handy trade-style polybag

Three different types available: PS-4040 Single 240V GPO PS-4060 Double 240V GPO

PS-4046 Double 240V GPO with Extra Switch

7	Cat.	Qty 1+	Qty 4+	Qty 10+	
Single GPO	PS-4040	\$4.95	\$4.45	\$3.90	
Double GPO	PS-4060	\$6.95	\$6.25	\$5.50	
Double GPO with extra switch	PS-4046	\$7.95	\$6.95	\$6.25	

Power Lead 3 Pin

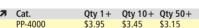
· Latest models with insulated pins 3 Pin 240V AC plug with 2 metres of 3 core cable to bare ends with lug on earth. 7.5A.



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	PS-4110	\$5.95	\$5.25	\$4.75

240V Line Plug 10A

- Safety clear plastic coverLatest models with
- insulated pins



Side Entry Line Plug 240V

· Latest models with insulated pins

7	Cat.	Qty 1+	Qty 10+	Qty 50+
	PP_/1001	\$4.05	\$1.15	¢3 00

240V Mains Line Socket

Safety type

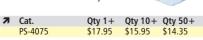


7	Cat.	Qty 1+	Qty 10+	Qty 50+
	PS-4008	\$7.95	\$6.95	\$6.25

240V Cordline Switch

Inline cord switch for 2 and 3 core cable up to 10 amps. Switches both neutral and active wires.

· Suitable for AC mains only.



Surface Mounting

Blocks

Standard mounting blocks for powerpoints and wall switches, or any other standard wallplates



Depth	Cat.	Qty 1+	Qty 10+	Qty 50+
16mm	PS-4063	\$4.95	\$4.45	\$3.90
30mm	PS-4062	\$5.95	\$5.25	\$4.75

Plaster Board Bracket



7	Cat.	Qty 1+	Qty 2+	Qty
	LT-3033	\$2.95	\$2.60	\$2.

Flat GPO **Mount Bracket**

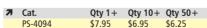
Mounting bracket for standard wall plate to be mounted on

· Install before plasterboard.

7	Cat.	Qty 1+	Qty 10+	Qty 50+
	PS-4077	\$1.95	\$1.75	\$1.65

Mains Panel Socket

Flush mounting 3 pin mains socket. Ideal for many situations where the socket cannot protrude far from its mounting bracket.



Mains Surface Socket

3 pin mains socket, where there is plenty of external room. No need to cut large hole in panel only for wiring.



			_	
7	Cat.	Qty 1+	Qty 10+	Qty 50+
	PS-4092	\$7.95	\$6.95	\$6.25

Mains Panel Sockets with Cover

Mains panel socket with spring loaded cover
• Approval no: Q090091

10A 250VAC

 Dimensions: 50(H) x 50(W) x 27.6(D)mm PS-4095

15A 250VAC

• Dimensions 62(H) x 50(W) x 27.7(D)mm PS-4097



7	Cat.	Qty 1+	Qty 10+	Qty 50+
10A	PS-4095	\$9.95	\$8.75	\$7.75
15A	PS-4097	\$9.95	\$8.75	\$7.75

240V 32A "BP" Mains Connectors

Available as a pack of 10 standard single screw connectors and 2 double screw. Ideal for safe, reliable earth connections.

"BP" style connectors. also known as acorns. (Double screw are for earth)

• 8 single and 2 double per pack

7	Cat.	Qty 1+	Qty 10+	Qty 50+
Pkt 10	HM-3192	\$9.95	\$8.75	\$7.75

Single

Junction Box

Dimensions: 70 x 70 x 37(D)mm



Double

7	Cat.	Qty 1+	Qty 10+	Qty 50+
	PS-4066	\$6.95	\$6.25	\$5.75

BUSBAR

Machined Brass Busbar - 8 Way



These are usually used to give an electrically common point for earth wiring but are also useful for low voltage tie points, especially on boats or RVs, Caravans etc., 6 holes accept up to a 4.5mm wire bundle and the outer 2 a 6.0 bundle. The Busbar has insulated standoffs at each end which can be removed so that the assembly can be screwed directly to a chassis. The standoffs have a conservative insulation rating of 1000V.

- All screws M4.0 Brass bar 9.0 x 6.0
- Length overall including standoffs: 100mm, without standoffs: 65mm.

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	SZ-2003	\$6.95	\$6.25	\$5.50

DID YOU KNOW...

Benjamin Franklin (1706 - 1790) The invention of electricity was a chain of inventions that led to

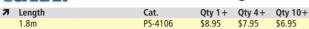
the modern-day use of electric power. Lightning is the purest and most basic form of electricity. It required great effort to bring this energy in everyday use. Benjamin Franklin is credited with the discovery of electricity through his wellknown experiment of flying a kite during a thunderstorm.

IEC POWERLEADS

Straight IEC female to 240V plug

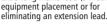
- 1.8 metres long.
- SAA Approved

SCANAR



Mains Lead SAA Plug to IEC Socket - 5m

Extra long mains lead (5 metres) to allow more options with





PS-4105 Right angle IEC female to 240V plug

- 1.8 metres long
- SAA Approved

7 Length



SCANAR

7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.8m	PS-4107	\$9.95	\$8.75	\$7.75

IEC Male to 3 Pin (GPO) Socket

Ideal for connecting a standard powerboard to a UPS etc.

- SAA approved 150mm long



\$13.95

SCANAR

7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	150mm	PS-4100	\$9.95	\$8.75	\$7.75

IEC female to IEC male

- 1.8 metres long.
- Earthed
- SAA Approved



y 10+
95
•

240V male to 2 X IEC female

- Length 2.0 metres.
- Earthed
- SAA Approved
- 540mm before join, each output 1550mm long.





SCANAR

7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	2.0m	PS-4102	\$16.95	\$14.95	\$13.35

IEC Male to 2 x IEC Female

Generally used for splitting "switched" outputs - like the one on the back of many computers that is used for powering the monitor. Now you can use this facility to turn on another device - like a printer, desk lamp...anything with an IEC male.

- Length 2.0 metres. SAA Approved





SPANAR

	Control of the last of the las				
7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	2.0m	PS-4104	\$17.95	\$15.95	\$14.35

POWER LEADS

2 Pin Power Lead - 1.8m

Black 240V 2 pin power lead as used in many appliances, eg: portable Hi-Fi, shavers etc.

- Universal round IEC C7 connector.
- Not earthed
- SAA Approved

SCANAR



Retractable 2 Pin Power Lead - 1m

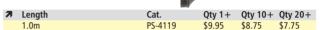
Black 240V retractable 2 pin power lead as used in many appliances, eg: portable Hi-Fi, shavers etc. Perfect for travellers or the laptop bag.

- 1m long & SAA approved
- IEC C7 connector

Qty 4+ Qty 10+

\$10.95

\$12.35



CLOVER LEAF

3 pin clover type to 240V plug

- 1.8 metres long.
- Farthed
- SAA Approved

SCAWAR

7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.8m	PS-4120	\$6.95	\$6.25	\$5.50

OEM'S - We can supply all these in bulk at very competitive prices.

FOREIGN PLUG LEADS

IEC320 Power Mains Leads

To suit 3 different regions/countries. We have had so many enquiries for these products that we now stock the following range which are black in colour and are all earthed.

USA

3 x 18AWG (41 x 34 strands) cable rated at 250/300V @ 10 amps.

- Temperature rated at 60° C and approved to UL817, CSA C.22.3 N.42, JIS C3306, C8303 and NEMA 5-15.
- 2 metres long

7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	2.0m	PS-4140	\$15.95	\$14.35	\$12.70

3 x 0.75mm2 (24 x 0.21 strands) cable rated at 500V @ 6 amps 250V @ 10 amps.

- Temperature rated at 70°C and approved to UK spec BS 1363-84
- 2 metres long

SCANAR

7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	2.0m	PS-4142	\$15.95	\$14.35	\$12.70

EUROPE/GERMANY

3 x 0.75mm ² (24x0.21 strands) cable rated at 500V @ 6 amps 250V @ 10 amps.

- Temperature rated at 70°C and approved to CEE (7) & VDE standards.

 • 2 metres long
- N15464





				_	
7	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	2.0m	PS-4144	\$15.95	\$14.35	\$12.70

IEC PLUG LEADS

IEC Locking Leads

Suitable for use with the mating panel-mount sockets. All are 2 metres long and lock into the socket until the locking tab is disengaged.

IEC LOCKING MAINS LEAD 2M Suits either PP-4174

or PP-4178



IEC LOCKING EXTENSION LEAD 2M Suits PS-4176

2.0 metres long

 SAA approved Cat. PS-4172



16A IEC LOCKING MAINS LEAD Suits PP-4182

 2.0 metres long SAA approved Cat. PS-4180

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	PS-4170	\$16.95	\$14.95	\$13.35
	PS-4172	\$16.95	\$14.95	\$13.35
	PS-4180	\$22.95	\$20.35	\$18.35

RELATED PRODUCT

See our new Power Boards on page 353

IEC CONNECTORS

IEC Locking Sockets

This range of IEC sockets is ideal for heavy-duty environments, such as industrial applications, server rooms, PA or music applications. The plugs lock into the sockets and can only be removed by disengaging the locking tab, so you don't lose the juice to your equipment if someone bumps or knocks it. All are 3-pin with earth connection.

LOCKING LINEUSED MALE IEC PANEL-MOUNT

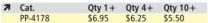
Screw mounting, requires a mounting hole 27 x 20mm. Suits panels up to 6mm thick Solder tabs, 10A rated



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	PP-4174	\$4.95	\$4.45	\$3.90

LOCKING FUSED MALE IEC PANEL-MOUNT

Snap-in, requires a mounting hole 32 x 28mm. Suits panels up to 1.6mm thick. Solder tabs, 10A rated. Accepts standard M205 fuses



LOCKING MALE 16A IEC PANEL-MOUNT

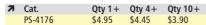
Screw mounting, requires a mounting hole 32 x 24mm. Suits panels up to 6mm thick. Solder tabs, 16A rated.



\$5.50 **LOCKING FEMALE IEC**

PANEL-MOUNT SOCKET

Snap-in female socket for slave power applications, such as powering a computer monitor from a tower Mounting hole 32 x 25mm, suits panels up to 1.6mm thick. Connection is by solder tabs, 10A rated



Line Male

Widely used in personal computers



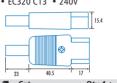


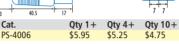
\$6.95

\$6.25

Line Female

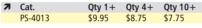
Safety approved number NSW21510 EC320 C13 • 240V





High Temperature IEC320 C15 Socket

Intended for service in higher temperature enviroments up to 120°C at a current rating of 10 amps. Incorporates a keyway which prevents being used with standard temperature IEC320 C14 connections.



Male Chassis

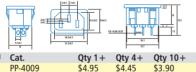
- Dimensions 50(W) x 22(H)mm



Snap-In Mains Socket

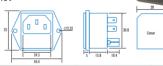
Panel-mounting IEC mains socket Unfused and non-switched

- Panel thickness: 0.8 3mm
- Cutout size: 27 x 19mm Rated for 250VAC at 10A
- 12 months warranty



Male Chassis with Fuseholder

- Dimensions 35(H) x 44(W) mounting holes 36mm apart. Cutout 31.5(H) x 28(W)mm.
- M205 fuse. IEC320 • 240V





Otv 10+

DID YOU KNOW...

Nikola Tesla (1856 - 1943)

A relatively recent (19th century) but very significant contribution to the discovery and use of electricity is the development of commercial electricity. And the one man this credit goes to, was

Nikola Tesla, a mechanical and electrical engineer and inventor. His works led to the development of modern-day electrical systems that use alternating current

Chassis Male with Switch & Fuse

- DPST switch.
- M205 size fuseholder
- IFC320

Otv 10+



Chassis Socket Female

- · Simply snaps in.
- IFC320



Rubber Covers

Slip over the back of the above IEC connectors to cover the mains terminals Available in 2 sizes



LARGE: Suits Cat PS-4002 & PP-4004

7	Cat.	Qty 1+	Qty 4+	Qty 10+
Small	PM-4015	\$2.75	\$2.45	\$2.30
Large	PM-4016	\$2.95	\$2.60	\$2.45

EMI Power Line Filter - 6 Amp

These Industry standard design RF/EMI filters are designed to reduce line - to - ground (common mode) interference They accept a standard IEC power line convertor and are panel mounted. They meet (or exceed)

international standard leakage requirements and are rated for mains voltages of 115 to 250V, 50, 60Hz. Safety & construction are in compliance with UL, CSA, VDE etc.

- Cutout 27 x 21mm
- IEC320

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	MS-4003	\$9.95	\$8.75	\$7.75

BUY IT ON THE WEB...

Shop for all these **Jaycar Electronics** products online at our website - and check out our latest products and special offers!





240V to 12VAC 105 Watt - Indoor

It will power 2 x 50W halogen globes or 5 x 20 watt. Ideal for 5 x 20W pathway lights, for example. Transformer must be used inside.

- 135(L) x 83(W) x 70(H)mm
- Output is via screw terminals
- 4 holes for easy screw mounting Cat. MP-3043

240V to 12VAC 150 Watt - Indoor

Delivers 150W at 12VAC. Enough to run 3 x 50W halogen, or 5 x 20W and one 50W, or 7 x 20W

- Transformer must be
- mounted inside
- Output is via screw terminals
 Dimensions 145(L) x 87(W) x 88(H)mm
 Includes 4 holes for easy screw mounting Safety approved number N16803
- Output 12.5Amps
 Cat. MP-3044

RENEWABLE ENERGY

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JOHER

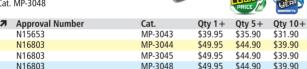
240V to 24VAC 150 Watt - Indoor

All globes must be 24V rated • Output 6.25 amps Cat. MP-3045

240V to 12VAC 150 Watt -Outdoor

Delivers 150W at 12VAC, max. current 12.5A

- · Unit is dust and waterproofed to IP44, and is suitable for mounting outdoors away from direct rain
- Dimensions 145(L) x 87(W) x 88(H)mm
 Includes 4 holes for easy
- screw mounting
 Output is via a 2 core figure
- 8 lead, 2 metres long Cat. MP-3048



LABORATORY POWER SUPPLIES

Fixed 13.8V Switchmode

High current general workshop power supplies for equipment component testing, etc. Internal cooling fans assist cooling at higher temperatures.

- · Banana socket style binding posts
- LED power on indication.
 Rear mounted M205 fuse
- Ideal for 12V amateur transceivers, linear amps and high powered car stereo bench testing
- 12, 20 and 40A models

Specifications:

Input voltage range:

Output connections:

Recommended fuse

Output voltage range:



7	Current (A)	Dimensions	Cat.	Qty 1+	Qty 3+	Qty 6+
	12	170 x 160 x 85mm	MP-3079	\$69.95	\$62.95	\$55.95
	20	170 x 190 x 85mm	MP-3078	\$99.95	\$89.95	\$79.95
	40	190 x 260 x 105mm	MP-3089	\$199.00	\$178.95	\$158.95

Compact Switchmode

Compact size, high current, variable output and fan cooling make these the ideal power supply for your bench. They are protected against thermal overload and short circuit and will display a warning LED in the event of a fault condition. Current and voltage are displayed on separate backlit analogue meters.

Two models available:



Specifications:	MP-3800	MP-3802
Voltage output:	0 - 24VDC	0 - 16VDC
Current output:	Max 18A, 15A continuous	Max 30A, 25A continuous
Ripple:	<9mV at rated load	<9mV at rated load
Output regulation:	<1%	<1%
Dimensions:	148(W) x 162(D) x 62(H)mm	148(W) x 162(D) x 62(H)mm

7	Voltage	Current (Max)	Cat.	Qty 1+	Qty 3+	Qty 6+
	0 - 24VDC	18A	MP-3800	\$149.00	\$133.95	\$118.95
	0 - 16VDC	30A	MP-3802	\$199.00	\$178.95	\$158.95

VARIAC

0-260VAC Variable Laboratory Autotransformer (Variac) - 500VA

The variable autotransformer (Variac is the trade name of a popular brand) is one of the most useful and efficient devices ever invented for the control of AC voltage and of voltage-dependent parameters such as current, power, temperature, light intensity, motor speed etc. It enables the AC input to a mains powered appliance to be easily varied from 0 to full line voltage (or greater). Encased in heavy-duty steel housing it also features on/off switch, outputvoltage meter, mains-supply lead and standard 3-pin power output. A must for testing appliance performance under real (simulated) mains fluctuations



New and improved
 Now supplied with slow blow fuses for extra reliablity.

		шаннапти
Specifications		
Rated power handling	500 VA (fused)	
Input Voltage	240 VAC @ 50Hz	
Output Voltage	0 ~ 260 VAC @ 50Hz	
Dimensions	165(D) x 120(W) x 160(H)mm	

Qty 1+ Qty 3+ Qty 6+ Cat. \$229.00 \$209.00 \$182.95 MP-3080

Freecall order hotline: 1800 022 888

13.8V Laboratory **Power Supplies**

These good looking power supplies are available in four current capacities of 5, 10, 20, and 30 amp. They use proven technology and are designed to give long service life in workshop situations. The range features short circuit protection on the output and a fused input.





LIERR

Specifications	MP-3096	MP-3097	MP-3098	MP-3099
Output voltage	13.8VDC	13.8VDC	13.8VDC	13.8VDC
Rated output	5 amps	10 amps	20 Amps	30 amps
Surge current	7 amps	12 amps	22 Amps	32 amps
Voltage regulation	<5%	<5%	<5%	<5%
Ripple voltage	100mV	120mV	150mV	150mV

7	Current (A)	Cat.	Qty 1+	Qty 3+	Qty 6+
	5	MP-3096	\$99.95	\$89.95	\$79.95
	10	MP-3097	\$129.00	\$115.95	\$102.95
	20	MP-3098	\$189.00	\$169.95	\$150.95
	30	MP-3099	\$249.00	\$225.00	\$198.95

Laboratory Power Supplies

LABORATORY POWER SUPPLIES (CONTINUED)

3V to 15VDC 40 Amp Regulated Switchmode

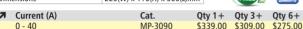
This high powered switch mode power supply will deliver up to 40 amps. It has a variable output voltage from 3 to 15VDC, or it can be fixed at 13.8VDC. The unit is suited to a variety of uses, especially DC powered equipment operating in a test or design environment and is ideal for car stereo

work. The unit has overload, over temperature and over voltage protection. Output voltage and current are displayed on large, easily read seven segment LED displays and incorporates an internal cooling fan.



Incredibly light for output capacity, weighing only 3.5Kg

Specifications	
Variable output	3V DC to 15VDC
Fixed voltage mode	13.8V DC
Max. output current	40 Amps (continuous)
Ripple & noise	10mVRMS
Load regulation	230mV @ 0 - 100% load
Dimensions	220(W) x 110(H) x 300(L)mm



1V TO 16VDC 0 to 40 Amp Regulated Switchmode

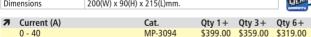
A high powered switchmode power supply that delivers up to 40 amps. It has a variable output voltage from 1 to 16VDC and variable current from 0 to 40A with a dual action (coarse/fine) microprocessor controlled rotary encoder tuning for smooth, precise and fast



settings. Banana sockets on the front provide up to 5A output and heavy duty hinding posts on the rear for larger current applications. A control mode switch on the rear allows the user to select between Normal, Preset (5V, 13.8 or 15VDC), Set (Userdefined) modes for quick access to frequently used VI settings, or Remote Control. The remote control feature offers a wide range or operation possibilities for sophisticated applications to adjust the voltage, current and on/off control (Additional components are necessary, which are explained in the user manual). An intelligent fan control program checks the fan at power on and adapts the right speed to ensure a quiet and efficient operation, and the isolated ground construction allows parallel or series connection of additional power supplies

- Switchmode
- High RFI immunity and excellent EMI
 Overload, short circuit, over temperature and tracking over voltage protected
- Incredibly light, weighing only 2.6kgs.

Specifications	
Variable output voltage	1VDC to 16VDC
Variable output current	0A to 40A
Max. output current	40 Amps (continuous)
Ripple & noise	5mV RMS
Load regulation	50mV @ 10 - 100% load.
Dimensions	200(W) x 90(H) x 215(L)mm.





This precision, automatic transfer type power supply provides stable voltage and current with regulated output voltage. Output voltage is adjustable from 0 up to 30VDC in constant voltage mode and output current is adjustable from 0 to 3 Amps in constant current mode. The unit features an uncluttered control panel with LCD meter, voltage, and current adjustment knobs. Output connection is by screw down integral banana sockets. This versatile PSU can be utilised in many areas of scientific research education electronics & electrical equipment repair.



Backlit LCD

TELL

Specifications	MP-3086	
Output voltage	0 - 32VDC	
Output current	0 - 3 Amps	
Ripple & noise	<1mVRMS	
Dimensions	130(W) x 160(H) x 320(D)mm	
Weight	6.5kg	

7	Current (A)	Cat.	Qty 1+	Qty 3+	Qty 6+
	0 - 3	MP-3086	\$199.00	\$178.95	\$158.95

0 to 32VDC Dual Output, Dual Tracking

This automatic constant-voltage/constantcurrent transfer type power supply is effectively two 0-32VDC 3 Amp power supplies in one case. The two outputs can be operated independently, connected in parallel , or series for multiple output currents and voltages. Coarse and fine voltage controls are provided on both outputs, along with current limit control. Both outputs have independent digital voltage and current



Displays are backlit and extremely easy to read.





Specifications	MP-3087
Output voltage	2 x 0 - 32VDC
Output current	0 - 3 Amps (x 2)
Ripple and noise	<1mVRMS
Load regulation	10mV max.
Dimensions	185(H) x 260(W) x 400(D)mm
Weight	10kg approx

7	Current (A)	Cat.	Qty 1+	Qty 3+	Qty 6+
	0 - 3	MP-3087	\$349.00	\$315.00	\$279.00

DID YOU KNOW...



- The invention of electricity dates back to 600 BC when Thales of Miletus wrote about the charging of amber on rubbing it. This was, what we now refer to as static electricity.
- In 1600, William Gilbert first translated the Greek word 'amber' to the word 'electricity' in English. He, for the first time used this word.
- Otto von Guericke invented a machine that produced static electricity in 1660.
- In 1675, Robert Boyle observed electric forces of attraction and repulsion transmitted through vacuum.
- Stephen Gray's discovery of the conduction of electricity in 1729, gave a new dimension to the idea of electricity.
- 1733 was the year when Charles François du Fay found out that electricity comes in two forms. He called them, resinous (-) and vitreous (+). They were later renamed as negative and positive, by Benjamin Franklin and Ebenezer Kinnersley.

POWERTECH SWITCHMODE POWER SUPPLIES

These units represent outstanding value for money and carry the same warranties and factory backup as the well-known brand-name products sold by us & others in the trade. You can confidently design these products into your production, as we will be definitely stocking these products for years to come. Indeed we will be expanding the range over time.

POWERTECH

- Summary of features:

 High efficiency and reliability
 Broad input voltage tolerances

- IEC Standards Compliant
 Short circuit, overload/overvoltage protected
 Soft-start Low ripple DC
- Multi-country Electrical Authority approvals

60 Watt - 12V & 24V

a 12 and 24 valt models

25 Watt - 12V & 24V

- 12 and 24 volt models available . DIN rail bracket to suit use MP-3150
- 110/240V switch
- Weight: 370g



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40 Watt - 12V & 24V

- 12 and 24 volt models available
- DIN rail bracket to suit use MP-3150
- 110/240V switch
- Weight: 450g



m	 12 and 24 voit models available DIN rail bracket to suit use MP-3152 Weight: 500g 		
MP-3167	Specifications	MP-3170	MP-3172

DC 24VDC 6 +/- 10% +/- mV 100mV A 1.1A	
mV 100mV	
1.1A	
77%	
53Hz 47-63Hz	
30A	
g 370g	
97x35 99x97x35	
	53Hz 47-63Hz 30A g 370g

7	Cat.	Qty 1+	Qty 3+	Qty 6+
12 Volt	MP-3160	\$44.95	\$40.45	\$35.90
24 Volt	MP-3162	\$44.95	\$40.45	\$35.90

Specifications	MP-3165	MP-3167
Output voltage	12VDC	24VDC
Tolerance	10% +/-	10% +/-
Ripple & noise	100mV	100mV
Output current	3.5A	1.8A
Efficiency	76%	76%
Input frequency	47-63Hz	47-63Hz
Cold start inrush current	60A	60A
Weight	450g	450g
Dimensions (LxWxH)mm	129x98x38	129x98x38

7	Cat.	Qty 1+	Qty 3+	Qty 6+
12 Volt	MP-3165	\$54.95	\$49.45	\$43.90
24 Volt	MP-3167	\$54.95	\$49.45	\$43.90

Specifications	MP-3170	MP-3172
Output voltage	12VDC	24VDC
Tolerance	10% +/-	10% +/-
Ripple & noise	120mV	150mV
Output current	5A	2.5A
Efficiency	76%	79%
Input frequency	47-63Hz	47-63Hz
Cold start inrush current	60A	60A
Weight	500g	500g
Dimensions (LxWxH)mm	159x97x38	159x97x38

.....

7	Cat.	Qty 1+	Qty 3+	Qty 6+
12 Volt	MP-3170	\$59.95	\$53.95	\$47.90
24 Volt	MP-3172	\$59.95	\$53.95	\$47.90

60 Watt 5V/4A 12V/3A Switchmode **Metal Frame Power Supply**

- Provides 5 and 12 volts at the same time Note: Total output must not exceed 60W
- Weight: 500g

REDEMBBLE EDERGY

POWER E

· DIN rail bracket to MP-3152



5VDC + 12VDC
10% +/-
75mV + 150mV
4A (5V) + 3A(12V)
73%
47-63Hz
60A
500g
159x97x38

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	MP-3174	\$64.95	\$58.50	\$51.95

100 Watt - 12V

- 12 volt output at 100 Watts.
- 110/240V switch
- Weight: 650g • DIN rail bracket to suit use MP-3152



Specifications	
Output voltage	12VDC
Tolerance	10% +/-
Ripple & noise	100mV
Output current	8.5A
Efficiency	81%
Input frequency	47-63Hz
Cold start inrush current	40A
Weight	650g
Dimensions (LxWxH)mm	199x98x50
4 C-4	04.4. 04.2. 04.6.

7	Cat.	Qty 1+	Qty 3+	Qty 6+	
	MP-3175	\$69.95	\$62.95	\$55.95	

100 Watt Open Frame - 24V

- Open Frame type. Auto switch input voltage.
 110/240V switch



Specifications	
Output voltage	24VDC
Tolerance	10% +/-
Ripple & noise	100mV
Output current	4.5A
Efficiency	84%
Input frequency	47-63Hz
Cold start inrush current	40A
Weight	450g
Dimensions (LxWxH)mm	222x62x33

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	MP-3179	\$69.95	\$62.95	\$55.95

120 Watt - 5V & 24V Dual Output

- Provides 5 and 24 volts at the same time. Note: Total output must not exceed 120W
- Automatic Input Voltage
- DIN rail bracket to suit use MP-3152

Specifications			
Output voltage		5VDC + 24	IVDC
Tolerance		10% +/-	
Ripple & noise		60mV + 1	50mV
Output current		6A + 4A	
Efficiency		80%	
Input frequency		47-63Hz	
Cold start inrush current		40A	
Weight		-	
Dimensions (LxWxH)mm		199x110x5	0
7 Cat.	Qty 1+	Qty 3+	Qty 6+

\$99.95

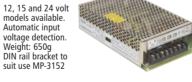
\$89.95

\$79.95

Freecall order hotline: 1800 022 888

150 Watt - 12V, 15V & 24V

- 12, 15 and 24 volt
- Automatic input voltage detection.
- Weight: 650g
 DIN rail bracket to suit use MP-3152



Specifications	MP-3185	MP-3187	MP-3189
Output voltage	12VDC	15VDC	24VDC
Tolerance	10% +/-	10% +/-	10% +/-
Ripple & noise	180mV	180mV	240mV
Output current	12.5A	10A	6.5A
Efficiency	82%	84%	85%
Input frequency	47-63Hz	47-63Hz	47-63Hz
Cold start inrush current	60A	60A	60A
Weight	650g	650g	650g
Dimensions (LxWxH)mm	199x110x50	199x110x50	199x110x50

7	Cat.	Qty 1+	Qty 3+	Qty 6+
12 Volt	MP-3185	\$94.95	\$85.50	\$75.95
15 Volt	MP-3187	\$94.95	\$85.50	\$75.95
24 Volt	MP-3189	\$94.95	\$85.50	\$75.95

240 Watt - 12V - 18 Amp

- Delivers 18 amps at 12 Volts.
- Automatic input voltage
- detection.

 Inbuilt thermally controlled fan for
- cooling.
 Weight: 1.1kg



2VDC
0% +/-
50mV
8A
32%
17-63Hz
86A
.1kg
05x93x65
3

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	MP-3250	\$169.00	\$151.95	\$134.95

Open Frame SMPS

MEAN WELL SWITCHMODE POWER SUPPLIES



The big advantage of switchmode power supplies over linear power supplies is their much higher efficiency (approaching 90% in some cases). NOTE: These are not stand alone units. They have exposed 240V terminals. They are meant to mount inside secure, earthed cabinets.

25 Watt - 12V & 24V

 DIN rail bracket to suit use MP-3150

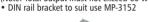


Specifications	MP-3102	MP-3103
Output voltage	12VDC	24VDC
Tolerance	1% +/-	1% +/-
Ripple & noise	100mV	100mV
Output current	2.1A	1.1A
Efficiency	76%	80%
Input frequency	47-63Hz	47-63Hz
Cold start inrush current	30A	30A
Weight	390g	390g
Dimensions (LxWxH)mm	99x97x35	99x97x35

Voltage (V)	Cat.	Qty 1+	Qty 3+	Qty 6+
12	MP-3102	\$54.95	\$49.45	\$43.90
24	MP-3103	\$54.95	\$49.45	\$43.90

60 Watt - 5V & 12V Dual Output

(Note: Total output must not exceed 60 watts).





5V + 12VDC
1% +/-
75mV + 150mV
4A + 3A
73%
47-63Hz
50A
510g
160x97x38

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	MP-3108	\$79.95	\$71.95	\$63.95

240 Watt - 13.8V - 18 Amp

This rugged power supply will deliver a massive 18 amps at 13.8 volts and is ideal for testing high power automotive equipment such as car audio and radio communications. The power supply features an integral temperature controlled cooling fan.



Specifications	
Output voltage	13.8VDC
Tolerance	1% +/-
Ripple & noise	159mV
Output current	18A
Efficiency	82%
Input frequency	47-63Hz
Cold start inrush current	30A
Weight	1.2kg
Dimensions (LxWxH)mm	205x93x65

Qty 3+ Qty 6+

\$219.00 \$196.95 \$174.95

40 Watt - 12V & 24V

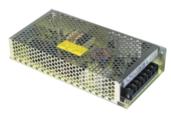


Specifications	MP-3104	MP-3106
Output voltage	12VDC	24VDC
Tolerance	1% +/-	1% +/-
Ripple & noise	100mV	100mV
Output current	3.5A	1.8A
Efficiency	76%	78%
Input frequency	47-63Hz	47-63Hz
Cold start inrush current	50A	50A
Weight	440g	440g
Dimensions (LxWxH)mm	129x98x38	129x98x38

Voltage (V)	Cat.	Qty 1+	Qty 3+	Qty 6+	
12	MP-3104	\$69.95	\$62.95	\$55.95	
24	MP-3106	\$69.95	\$62.95	\$55.95	

100 Watt - 12V

- 100% full load burn-in test
- Universal AC input / full range
 DIN rail bracket to suit use MP-3152



Specifications			
Output voltage		12VDC	
Tolerance		1% +/-	
Ripple & noise		125mV	
Output current		8.5A	
Efficiency		79%	
Input frequency		47-63Hz	
Cold start inrush current		40A	
Weight		650g	
Dimensions (LxWxH)mm		198x99x38	
1 Cot	Oty 1 :	Oty 2 I	Oty 6 I

7	Cat.	Qty 1+	Qty 3+	Qty 6+	
	MP-3121	\$84.50	\$75.95	\$67.50	

- Range Features:
 Overload protection & current limitation
 Screw down terminals & strong metal case
- High efficiency High reliability
- Built -in EMI filter Selectable voltage

60 Watt - 12V & 24V

2 models available

- Compact size, light weight100% full load
- burn-in test
 Universal AC input full
- range
 DIN rail bracket to suit use MP-3152



Specifications	MP-3107	MP-3109
Output voltage	12VDC	24VDC
Tolerance	1% +/-	1% +/-
Ripple & noise	120mV	150mV
Output current	5A	2.5A
Efficiency	76%	79%
Input frequency	47-63Hz	47-63Hz
Cold start inrush current	50A	50A
Weight	510g	510g
Dimensions (LxWxH)mm	160x97x38	160x97x38

Voltage (V)	Cat.	Qty 1+	Qty 3+	Qty 6+
12	MP-3107	\$74.95	\$67.50	\$59.95
24	MP-3109	\$74.95	\$67.50	\$59.95

150 Watt - 12V, 15V & 24V

There are three models in the 150-watt range.

DIN rail bracket to suit use MP-3152



Specifications	MP-3110	MP-3112	MP-3114
Output voltage	12VDC	15VDC	24VDC
Tolerance	1% +/-	1% +/-	1% +/-
Ripple & noise	180mV	180mV	240mV
Output current	12.5A	10A	6.5A
Efficiency	82%	84%	85%
Input frequency	47-63Hz	47-63Hz	47-63Hz
Cold start inrush current	35A	35A	35A
Weight	800g	800g	800g
Dimensions (LxWxH)mm	199x110x50		

Voltage (V)	Cat.	Qty 1+	Qty 3+	Qty 6+	
12	MP-3110	\$109.00	\$97.95	\$86.95	
15	MP-3112	\$109.00	\$97.95	\$86.95	
24	MP-3114	\$109.00	\$97.95	\$86.95	

DIN RAIL POWER SUPPLIES

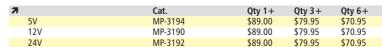
45 Watt Industrial DIN Rail **Switchmode Power Supplies**

These compact and light weight industrial DIN rail switchmode power supplies features full temperature, voltage and current overload protection. They have a built-in EMI filter, a power on LED and operate from 85 ~ 264VAC to provide either 12 Volts DC @ 3.5A or 24 Volts DC @ 2.0Amps. Input and output connections are via a 7.5mm pitch terminal block.



Specifications	MP-3194	MP-3190	MP-3192
Input voltage	85-265VAC, 120-370VDC	85-265VAC, 120-370VDC	85-265VAC, 120-370VDC
Input frequency	47-63Hz	47-63Hz	47-63Hz
Output voltage	5VDC	12VDC	24VDC
Line regulation	1% +/-	1% +/-	1% +/-
Ripple & noise	100mV	200mV	480mV
Output current	5A	3.5A	2A
Efficiency	72%	77%	80%
Cold start inrush current	60A @ 230V	60A @ 230V	60A @ 230V
Dimensions	93x78x67mm	93x78x68mm	93x78x69mm





Cat.

MP-3118

DC-DC Converters

DIN RAIL POWER SUPPLIES (CONTINUED)

120 Watt Industrial DIN Rail **Switchmode Power Supplies**





MEAN	WELL
	MP-3197
AC (switch),	110/240VAC (switch),
DC .	248-370VDC
	47-63Hz
	48VDC
	10/. 1 /

Specifications	MP-3195	MP-3196	MP-3197
Input voltage		110/240VAC (switch),	
iliput voltage	248-370VDC	248-370VDC	248-370VDC
Input frequency	47-63Hz	47-63Hz	47-63Hz
Output voltage	12VDC	24VDC	48VDC
Line regulation	1% +/-	1% +/-	1% +/-
Ripple & noise	80mV	80mV	100mV
Output current	10A	5A	2.5A
Efficiency	80%	84%	85%
Cold start	40A @ 230V	40A @ 230V	40A @ 230V
inrush current	40A @ 230V	40A @ 230V	40A @ 230V
Dimensions	65x125x100mm	65x125x100mm	65x125x100mm

7	Voltage (V)	Cat.	Qty 1+	Qty 3+	Qty 6+
	12	MP-3195	\$149.00	\$133.95	\$118.95
	24	MP-3196	\$149.00	\$133.95	\$118.95
	48	MP-3197	\$149.00	\$133.95	\$118.95

DIN Rail Brackets

DIN Rail brackets to suit switchmode DIN andenclosed frame power supplies. MP-3150 suits 25 & 40 watt models MP-3152 suits 60, 100, 120, 150 watt models MP-3154 Clip is required for the brackets above, which is then attached onto the DIN rail. Note: M3 and M4 screws are required.



7	Туре	Cat.	Qty 1+	Qty 3+	Qty 6+
	1 DIN	MP-3150	\$5.95	\$5.25	\$4.75
	2 DIN	MP-3152	\$6.95	\$6.25	\$5.50
	Clip	MP-3154	\$5.95	\$5.25	\$4.75

DC - DC CONVERTERS

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DC to DC Voltage Step-up Converter

This compact DC to DC converter will double the voltage applied to its input terminals and produce an output voltage in the range of 11 to 26 volts DC at up to

2 amps. This allows you to operate 12 volt car radios, CB radios, amplifiers etc. in a 6 volt car or motor cycle etc. A potentiometer can be added to 'fine tune' the output voltages as required.

Specifications	·		•	- Jane	uri C
Input Voltage	6 to 14VDC				7////
Output Voltage	11 to 26VDC				////
Output Current	2 amps Max. (Depend	ls on output volt	tage)		111.
Dimensions	82(W) x 23(H) x 60(D)	mm			\ \
Current		Cat.	Qty 1+	Qty 3+	Qty 6+
2A		AA-0264	\$44.95	\$40.45	\$35.90

DC-DC Regulated Converters

Low noise voltage converter for communication applications.

Specifications	
I/O Isolation voltage	1000VDC Min
I/O Isolation resistance	100MΩ Min
Isolation capacitance	80pF (max)
Operating temperature	-25°C to +85°C



1 WATT MODULE

Input	Output	Current	Cat.
5VDC +10%	5VDC	200mA	MP-3200
24VDC +10%	5VDC	200mA	MP-3202







7	Current		Cat.	Qty 1+	Qty 3+	Qty 6+
	200mA	5VDC	MP-3200	\$9.95	\$8.75	\$7.75
	200mA	24VDC	MP-3202	\$9.95	\$8.75	\$7.75
	600mA	9-18VDC	MP-3204	\$19.95	\$17.70	\$15.70
	600mA	18-36VDC	MP-3206	\$19.95	\$17.70	\$15.70

Freecall order hotline: 1800 022 888

24VAC/DC to 12VDC 300mA Adaptor

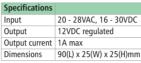
This simple looking device consists of a tiny 40 x 25 x 19mm module with 300mm leads connected to each end. On the input side there is a 22AWG terminal block for connecting a 24V AC or DC source. On the output side, there is a 2.1mm DC plug where you have a regulated 12VDC supply, at up to 300mA. The AC input can be 20 - 28V, and the DC input can be 16 - 30V.



7	Current	Cat.	Qty 1+	Qty 3+	Qty 6+
	300mA	MP-3069	\$22.95	\$20.35	\$18.35

24VAC/DC to 12VDC 1A Converter

Trying to get power for CCTV and security cameras over a long run without losses is challenging to say the least. Solve the problem quickly and easily by sending 24VAC down the long run, then converting it to 12VDC when you get it where you need it. Connection is by screw terminals



Dimensions	90(L) X 25(W) X 25(H)IIIII				WARRANTY
7	(Cat.	Qty 1+	Qty 3+	Qty 6+
	ľ	MP-3350	\$34.95	\$31.45	\$29.90

24VDC to 12VDC 1.1A Converter

All modules in this column reduce 24V truck or marine DC systems to enable car stereos, CBs, indeed all standard 12V products to work safely within the higher voltage

Simply establish how much power your 12V product needs and choose the appropriate reducer. For very low current applications,

see MP-3069 above.

Specifications	
Input voltage	24 - 30 VDC
Output voltage	12VDC approx
Maximum load	1.1A
Dimensions	60 x 55 x 20 mm

7 Current		Cat	0
Dimensions	60 x 55 x 20 mm	Ì	1
Maximum load	1.1A	-	
Output voltage	12VDC approx	40.0	



7	Current	Cat.	Qty 1+	Qty 3+	Qty 6+
	1.1A	AA-0265	\$22.95	\$20.35	\$18.35

24VDC to 12VDC 3A Converter

Many trucks and boats use 24V systems. These converters will allow you to run a reasonably sized 12V car-stereo or other devices from a 24V supply. Heatsink (not included) should be used for superior performance.

Specifications	
Short-circuit protection	
Thermal cutout	
Input voltage	24 to 26 VDC
Output voltage	12VDC
Maximum load	3A
Dimensions	135 x 50 x 24 mm
Heatsink	50 x 100 x 30 mm (rec. size) use Cat. HH-8572 or similar
7	Cat

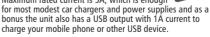


			WARRANTY
Cat.	Qty 1+	Qty 3+	Qty 6+
AA-0266	\$29.95	\$26.90	\$23.70

24VDC to 12VDC 5A Converter with USB

For those with a 24V vehicle such as a truck or bus finding accessories like chargers and power supplies that run off 24V can be near impossible. This handy little device solves that problem by converting 24VDC to 12VDC so that you can use normal car accessories designed for 12V vehicles. Connection couldn't be easier, with a cigarette lighter plug for 24V input and a cigarette lighter socket for the 12V output. Maximum rated current is 5A, which is enough

7.1



Specifications			
Input voltage	12 - 30VDC		
Output voltage	12VDC		
Max, output current	5A		
Continuous output current	4A		
Efficiency	85%		
Dimensions	100(L) x 76(W) x 38(H)mm		
4	Cat	Oh. 1 :	042

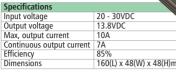
7	Cat.	Qty 1+	Qty 3+	Qty 6+
	MP-3354	\$49.95	\$44.90	\$39.90

DC-DC Converters & Car PSUs

DC - DC CONVERTERS (CONTINUED)

24VDC to 12VDC 10A Converter

DC to DC converters are useful for running 12V devices from a 24V supply in a truck or bus. These have switchmode technology for light weight and compact design and are rated for 10A. Input and output is via cigarette lighter plug and socket.





24VDC to 12VDC Converters

DC to DC converters are useful for running 12V devices from a 24V supply in a truck or bus. These have switchmode technology for light weight and compact design, and come in a range of current ratings up to 40 amps.



Specifications	MP-3061	MP-3063	MP-3066
Current	10 Amp	20 Amp	40 Amp
Input voltage	20 - 30VDC	20 - 30VDC	20 - 30VDC
Output voltage	13.8VDC	13.8VDC	13.8VDC
Max, output current	10A	20A	40A
Continuous output current	7A	15A	30A
Efficiency	85%	85%	85%
Dimensions L x W x Hmm	160 x 48 x 48	210 x 90 x 50	200 x 192 x 70

7	Current	Cat.	Qty 1+	Qty 3+	Qty 6+
	10A	MP-3061	\$59.95	\$53.95	\$47.90
	20A	MP-3063	\$99.00	\$88.95	\$78.95
	40A	MP-3066	\$149.00	\$133.95	\$118.95

MOTOR CONTROLLERS

Motor Controller

Control DC loads such as motors, lamps etc. Pulse Width Modulation (PWM) also allows electric motors to start smoothly at low RPM. Control range is approximately 5% to 95% of maximum output, set with a 47k potentiometer

Specifications		POWEN CONTINUA OF	ECC.	9	
Operating voltage	9 - 28 V/DC	8 mm 1 1	Class	THE STATE OF THE S	
Max. current	10A with heatsink,	4 6.0	-01	A. C.	
carrying capacity	5A without heatsink	A TOTAL	TE.		in the
Control range	< 5% to > 95%			•	
Control mode.	pulse width modulation				
Dimensions	86(L) x 60(W) x 33(H)mm	0		L L	

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	AA-0349	\$69.95	\$62.95	\$55.95

12VDC 8A Dimmer/Motor Speed Controller

DC speed controllers are ideal for slowing down pumps and motors or dimming lights but commonly use resistance circuits and are very inefficient. The pulse width modulation (PWM) used

in this controller allows you to vary the output from 0 to 100% while maintaining a very high efficiency. When used on motors this ensures full torque is available at very low speed and the motor won't shudder at start-up. Operates on any 12VDC system and capable of controlling devices rated at up to 8 amps. The internal circuitry is fully potted and the control potentiometer is splash proof making this

suitable for marine environments and other harsh conditions.

• Dimensions: 95(L) x 46(W) x 47(H)mm (including knob)

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	MP-3209	\$27.95	\$24.95	\$22.35

CAR POWER SUPPLIES

Switchmode Power Supplies -Mains to Cigarette Lighter Socket

A handy solution for powering 12V equipment such as car coolers and camping fridges from a mains AC power source. Supplied with a 1.5m output lead with cigarette socket output, making connection simple and easy.

12VDC 7.5A

Input voltage: 240VAC Dimensions: 157(L) x 90(W) x 57(H) mm MP-3575

12VDC 12.5A

Input voltage: 240VAC Dimensions: 200(L) x 100(W) x 65(H)mm







MP-3575

7	Current	Cat.	Qty 1+	Qty 5+	Qty 10+
	7.5A	MP-3575	\$39.95	\$35.90	\$31.90
	12.5A NEW	MP-3573	\$89.95	\$80.95	\$71.95

POWER SUPPLY ACCESSORIES

Battery Protector Cig Plug - Socket 1m 10A

Ideal for use in cars, trucks, boats and recreational vehicles. When the vehicle's battery falls below 11.2 volts, the Battery Protector will automatically suspend power to any connected 12 volt accessory, saving enough battery power to start the car.

Designed to work with 12 volt accessories and appliances which have a maximum load current of 10amps. It has LED indicators to advise if power has been suspended or whether the battery is in good condition.

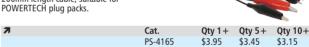
- Plugs directly into the cigarette lighter socket of the vehicle
- 10 amp fuse protection1 metre supplied lead.



Qty 2+ Otv 4+ Cat. \$17.70 \$15.70 MS-6120 \$19.95

Alligator Clip Lead Set for Powertech Plugpacks

2 pin oval lead - 2 x alligator clips on 200mm length cable, suitable for



See Battery Bank with USB socket & switch on page 374

In-line Low Voltage Switch

Simply connect your plug pack adaptor into this handy in-line switch to provide quick and easy on/off control. Much easier than unplugging the connector or reaching for the power point when you want to switch your

device on or off.
• Fitted with 2.1mm DC plug & socket and rated at 24VDC at 2 amps

- · · · - · · · · · · · · · · · · · · ·			-	
7	Cat.	Qty 1+	Qty 10+	Qty 25+
	SK-0998	\$7.95	\$6.95	\$6.25

7 Plug DC Wiring Kit

Configure your own plugpacks or wire to projects to give standard DC output plugs. Includes the same socket and 7





7	Cat.	Qty 1+	Qty 3+	Qty 6+
	PP-1980	\$6.95	\$6.25	\$5.50

CAR POWER SUPPLIES

2A Regulated 12VDC Power Adaptor

This converter will operate on 12 and 24 volt car and truck systems and plugs directly into the cigarette lighter socket. Output voltages are 3, 4.5, 5, 6, 7.5, 9 and 12VDC at 2000mA, fully regulated. The adaptor is suitable for use with most personal stereos, CD/MD players, LCD TV, digital cameras, electronic games, etc. Note: The 12V output will only be regulated when the unit is used on 24V systems. Six adaptor plugs are supplied and can be stored in the clever compartment built into the case.





7	Cat.	Qty 1+	Qty 3+	Qty 6+
	MP-3038	\$24.95	\$22.35	\$19.70

Digital Car Power Adaptor - 3A

Offers 7 different DC voltages with 3A continuous output, plus a USB charging output suitable for the latest smart phones and i-gadgets. The microprocessor controlled design provides accurate digital read outs of vehicle's battery voltage, selected output voltage and power used by the load. The vehicle battery is protected against over discharge by a low voltage cut out feature.
LCD features selectable backlight colours.

- Input voltage: 12V or 24V battery systems
 Output voltage: 1.5/3/4.5/5/6/7.5/9/12VDC (12VDC output only available
- with 24V input) Output current: 3A max,
- (USB: 500mA max)
 Dimensions: 98(L) x 57(W) x 17(H)mm



LJE FIR

RENEWABLE ENERGY

16

1	Cat.	Qty 1+	Qty 3+	Qty 6+
	MP-3673	\$69.95	\$62.95	\$55.95

5A Regulated 12VDC Car Power Adaptor

This adaptor will power MP3 players, games, CD players, appliances or anything else that requires 5 - 12VDC at up to 5A. It's also fuse protected & includes four plug adaptors to suit most popular devices.

- · Four plug adaptors
- Selectable voltage: 5, 6, 9 & 12VDC
- Fuse protectedLead length: 1400mm



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	MP-3478	\$39.95	\$35.90	\$31.90

6A Regulated 12VDC Car/Truck Power Adaptor

Simply connect to a cigarette lighter socket in your car or truck for a regulated 12VDC output at up to 6 amps, more than enough for a portable DVD player, TV, LCD screen or any other 12 volt device. You can also use it to run a DVD player from your car's 12 volt supply, as many portable DVD players will only run on a regulated 12 volt supply and will self-destruct if connected to the typical 13.8 volts of a car's electrical system



Freecall order hotline: 1800 022 888

CHARGERS FOR MOBILE PHONE, GPS & iPOD®

USB Car Chargers

For anyone with a mobile phone or other device that charges from a USB socket, these are the perfect solution for recharging in the car. Simply plug into your car's cigarette lighter socket, and you have a readily available USB charging source. Two models are available - one has just a single USB socket with 1.0A available making it suitable for most mobile phones, iPods® and iPhones®; and the other has two USB sockets with a total of 3.1A available (2.1A + 1.0A) making it suitable for charging an iPad® and mobile phone/iPod®/iPhone® at the same time.

1.0A USB CAR ADAPTOR

- Input: 10-18VDC
- Output: 5VDC, 1.0A
 Dimensions: 24(Dia) x 52(L)mm Cat MP-3662

3.1A DUAL USB CAR ADAPTOR

- Input: 10-18VDC Output voltage: 5VDC, 2.1A + 1.0A (3.1A total) Dimensions: 26(Dia) x 60(L)mm

Cat MP-3664

7	Cat.	Qty 1+	Qty 5+	Qty 10+
1A	MP-3662	\$9.95	\$8.75	\$7.75
3.1A	MP-3664	\$19.95	\$17.70	\$15.70

Universal USB Mobile Phone Car Charger

The handy universal solution to charging your mobile phone in the car. Included is a cigarette lighter USB car charger capable of delivering 5VDC up to 1A via the USB output, as well as a universal USB charging lead with 9 interchangeable tips to match all the most common mobile phones. You can also use it with any existing USB charging lead you may have.

Specifications		-			
Input	12 - 24VDC	-			100
Output	5VDC, 1.0A		1	1	
Plugs included: • USB Mini 5pin • USB Micro B • iPhone®/iPod® • Sony Ericsson	LGMotorolaSamsungNokia 2mmNokia 4mm				HERR WARRANTY
7		Cat.	Qty 1+	Qty 5+	Qty 10+
		MP-3578	\$19.95	\$17.70	\$15.70

		MP-3578	\$19.95	\$17.70	

USB Car Chargers for iPad®/iPhone®/iPod® Charge your full arsenal of Apple devices while you're driving. Simply plug into the car's cigarette lighter outlet. Nothing new about that, but the difference with these is that the USB port(s) put out a huge 2.1A to fast charge an iPad®. Single outlet or double outlet models available. Please note that only one of the outlets on the double outputs 2.1A; the other is rated for 1A (to suit an iPhone® etc). Both units include a USB charging cable to suit iPad®/iPhone®/iPod®.

7		Cat.	Qty 1+	Qty 5+	Qty 10+	
	Single Outlet Charger	MB-3657	\$24.95	\$22.35	\$19.70	
	Double Outlet Charger	MB-3659	\$29.95	\$26.90	\$23.70	

Universal GPS Charger with Dual USB Output

This very handy universal GPS charger not only works as a replacement for an original GPS charger, but having two USB outputs and higher output power offers a bonus allowing you to charge both your GPS and your mobile phone (or other USB device) at the same time! With 2.1A available from each USB port, it has enough power for even the latest and greatest big screen GPS models, whilst still having enough power left over to charge a second USB device. Supplied with 1.2m USB charging lead and 6 replaceable connectors to suit most GPS models.

- Suitable for: TomTom, TomTom XL, Navman, Garmin, Magellan, Navigon,
- Falk, Mio, etc
- Output: 5VDC, 2.1A max per USB port
- Dimensions: 100(L) x 42(W) x 25(H)mm



Nokia Plug Adaptor

Nokia phones have a smaller DC charging plug. This makes all these spare chargers you have lying around obsolete. Not now! This adaptor accepts the larger DC plug and converts it to the smaller one, enabling you to have a spare charger at work etc!



MR-3657

7	Cat.	Qty 1+	Qty 10+	Qty 50+
	PA-3710	\$5.95	\$5.25	\$4.75

In-Car & Portable Chargers

CHARGERS FOR MOBILE PHONE, GPS & iPOD® (CONTINUED)

Car and Mains Mobile Phone Charger Pack

The handy universal solution to charging your mobile phone in the car or home. Included is a cigarette lighter USB car charger and a mains USB charger each capable of delivering 5VDC up to 1A via a USB output. The pack also includes a universal USB charging lead with 4 interchangeable tips to match common mobile phones. You can also use either charger with any existing USB charging lead you may have



Car Charger: 100(L) x 36(W) x 31(H)mm Mains Charger: 69(H) x 41(W) x 39(D)mm

MR-3655 \$26.90 \$23.70

Universal Mobile Phone Charger

Charges every common mobile phone, iPhone® and the latest Nokia models as well as some PDA and MP3 players. Includes 8 plugs to suit:LG Shine, Motorola V3, Siemens C62, Samsung

D528, Sony Ericsson W910i, Nokia N-series, Nokia 3210, iPhone®/iPod®

• Suitable for new model iPods® including iPod Touch® 3G



Qty 5+ Qty 10+ MB-3656 \$29.95 \$26.90 \$23.70

Mains Travel Adaptors for USB, iPod® & MP3 Players

Handy for charging USB devices without needing to connect the device to your computer. Switchmode adaptor with 5VDC output and 1A max current. USB cable not included as most users will already have this but we have a range of USB cables including a model to suit the iPod®. Suitable for iPhone® and latest

generation iPod® products including the iPhone®4. The kit includes 4 interchangeable adaptors for Australia, US, UK and Europe power outlets.

Specifications	
Input	100-240VAC 50/60Hz
Output voltage	5VDC
Output current	1A max.
Dimensions	68(L) x 55(W) x 52(H)mm

Approval No. Qty 5+ Qty 10+ MP-3452 \$17.70

iPhone®/iPod® Car Charger/Audio Kit Suited to in-car stereo systems with 3.5mm audio-in

socket to play music from popular, portable audio devices. Listen to your favourite songs from your iPhone®/iPod® using the integrated audio cable (with a 3.5mm stereo adaptor) while charging it via the supplied cigarette lighter adaptor. Lead length is 1.2m and USB output is 1A.



Retractable USB Multi Charger Kit

Charge a multitude of different phone or media player devices from any USB port and eliminate the need to cart a mains powered adaptor around. Ideal for students, business people or travellers. Suits just about everything, including PDAs and cameras

15 adaptors included in the kit, covering the following models and more:

- Motorola V998, T191, V66, V3(i)
- Blackberry
 Nokia 8210, 6101
- Samsung A228, D800, A460
- Sony Ericsson T28, K750
 LG8080, KG800
- iPod®, Nano® and iPhone®
 Palm T5, Treo, 650,
- 700, 700W, 700p



Solar Charger for Mobile Devices

A handy gadget that charges your mobile phone, iPods® and other electronic devices with its solar panel and built in Li-ion battery. The integrated LED light panel illuminates your tent, path, etc. A perfect companion for your outdoor adventures!



- Input voltage: mini-USB, 5V
 Output voltage: USB A type, 5V 500mA
- Solar charging time: 12Hrs
- Light on: more than 5 hours (full charge)
- LED light Lumens: 60LM
- Connectors: Sony Ericsson, Nokia, iPhone®/iPod®, Samsung, USB Mini B
- USB Micro B lead included

Dimensions: 215(L) x 125(W) x 35(H)mm

Qty 2+ MR-3591 \$34.95 \$31.45

Outdoor USB Solar Charger

Charge portable devices wherever the sun shines using this handy USB solar charger. Supplied in a heavy duty nylon pouch the solar panel outputs 5 volts via a USB port located on the side. Using the included lead and adaptor set you can charge portable devices such as media players and Smartphones or use an existing USB charge cable for any other devices. The adjustable elastic strap and snap lock clips on the pouch allow you to attach the panel to your backpack, tent, or bike so you can charge on the go and the embedded LED display will show you the charging status.

- Output Voltage: 5VDC Peak Current: 500mA Dimensions: 250(H) x 170(W) x 15(D)mm

- Adaptor Plugs Included:
 USB Mini 5pin
 iPhone®/iPod®
- Sony Ericsson Samsung
- Nokia 2mm







MB-3593 \$44.95

Solar Mobile Charger

A pocket sized solar panel with a built-in lithium battery that you can charge your gadgets anytime, anywhere. Charge via direct sunlight or by connecting it to a power socket in your car or home. Stored power can be used to recharge a range of different types of mobile phones, PDA's, MP3 players or digital cameras. Compact and convenient design featuring two USB sockets to charge many USB compatible devices and a nifty LED light function in case you get caught out in the dark. The perfect travel companion for camping, hiking or when out and about.

iPhone® not

included

- Variable output voltage Output power: 4.5 9W, 1A max Open circuit voltage: 4.5 5 5.5 9V
- Lithium battery: 2000mAH
- Weight: 216g Dimensions: 125(L) x 24(H) x 75(W)mm

7	Cat.	Qty 1+	Qty 2+	Qty 4+
	MB-3598	\$54.95	\$49.45	\$43.90

USB Power Bank with 2600mAh Battery

Never be caught out with a flat phone battery. Simply connect your phone or other mobile device for a quick charge so you can make that urgent call. It features a USB charging port and lead with 3 connectors for charging all variety of smart phones, tablets and USB charged devices. The device itself can be recharged with the supplied micro USB to USB cable.

- 2600mAh Li-lon battery
- Output lead with 3 connectors included: Mini-USB, Micro-USB, Apple® iDock
- Dimensions: 76(L) x 33(W) x 29(D)mm





ECLIPSE ALKALINE BATTERIES

Eclipse batteries are made to the same specifications of those well known expensive brands advertised on TV, but at a realistic price. We are very, very proud of these products and stand behind them unconditionally. If you try them & are disappointed with them for any reason we will give you a full refund <u>and</u> another set of ECLIPSE batteries to see if you can work out what went wrong!

ALKALINES - AAA



SB-2426 Blister pack of 2 x AAA SB-2413



SR-2328 Contains 40 x AAA



SB-2331 Contains 24 x AAA



Pack	Size	Cat.	Qty 1+	Qty 10+	Qty 20+
2	AAA	SB-2426	\$1.95	\$1.75	\$1.55
4	AAA	SB-2413	\$3.95	\$3.45	\$3.15
12	AAA	SB-2334	\$7.95	\$6.95	\$6.25
24	AAA	SB-2331	\$12.95	\$11.35	\$10.35
NEW40	AAA	SB-2328	\$17.95	\$15.95	\$14.35

ALKALINES - AA













7	Pack	Size	Cat.	Qty 1+	Qty 10+	Qty 20+
	2	AA	SB-2424	\$1.95	\$1.75	\$1.55
	4	AA	SB-2425	\$3.95	\$3.45	\$3.15
	12	AA	SB-2333	\$7.95	\$6.95	\$6.25
	24	AA	SB-2329	\$12.95	\$11.35	\$10.35
	40	AA	SB-2332	\$17.95	\$15.95	\$14.35

ALKALINES - C

SB-2416 Blister pack
 of 2 x C





7	Pack	Size	Cat.	Qty 1+	Qty 10+	Qty 20+
	2	C	SB-2416	\$3.95	\$3.45	\$3.15
	4	C	SB-2320	\$6.95	\$6.25	\$5.50

ALKALINES - D





7	Pack	Size	Cat.	Qty 1+	Qty 10+	Qty 20+
	2	D	SB-2418	\$3.95	\$3.45	\$3.15
	4	D	SB-2321	\$7.50	\$6.75	\$5.95

ALKALINES - 9V



7	Pack	Size	Cat.	Qty 1+	Qty 10+	Qty 20+
	1	9V	SB-2423	\$3.95	\$3.45	\$3.15
	6	9V	SB-2417	\$13.95	\$12.35	\$10.95

ALKALINES - MIXED PACK

Handy grab-pack of the most popular Eclipse alkaline batteries. The case is reusable, so just keep it in the pantry and top it up when you run out.

The pack contains:

- 12 x AA
- 10 x AAA 4 x C
- 4 x D 1 x 9V

BUY IN BULK AND SAVE



7	Cat.	Qty 1+	Qty 10+	Qty 20+
Bulk Assorted Pack	SB-1500	\$24.95	\$22.35	\$19.70

Batteries - Alkaline & Specialty

HEAVY DUTY BATTERIES

Energizer Alkaline

BATTERY PRICES

Generally the cheapest Energizer prices come from the large supermarkets. We buy large quantities of Energizer batteries and try to pass them on at good prices. We constantly monitor supermarket prices to keep our Energizer batteries as cheap as possible to you.



• B	lister Packed			
7	Size	Pkt	Cat.	Qty 1+
	AAAA	2	SB-2388	\$6.45
	AAA	2	SB-2380	\$4.49
	AA	2	SB-2382	\$4.29
	AA	4	SB-2383	\$7.29
	C	2	SB-2386	\$5.99
	D	2	SB-2390	\$6.09
	9V	1	SB-2395	\$5.99

6, 9, 12V Alkaline Batteries

Blister packed

(A) 12V CAR ALARM REMOTE CONTROL BATTERY - A23 TYPE/L1028/SLR23/GP23A (HOUSE BRAND)

As used in remote controls for most car alarms. Size 9.5mm dia x 27mm high. See photo "A".

7	Cat.	Qty 1+	Qty 10+	Qty 20+
	SB-2420	\$1.95	\$1.75	\$1.55

(B) 12V THIN CAR ALARM REMOTE CONTROL BATTERY - L828 TYPE

As used in new generation small sized car alarm remote controls. Size 8mm dia x 28mm high. See photo "B".

7	Cat.	Qty 1+	Qty 10+	Qty 20+
	SB-2422	\$3.20	\$2.83	\$2.45

(C) 6V ALKALINE BATTERY - L1325/4LR44 TYPE

These are the same size as A544 batteries. Used mainly in cameras.

Size 13mm dia x 25mm. See photo "C"

7	Cat.	Qty 1+	Qty 10+	Qty 20+
	SB-2415	\$3.25	\$2.90	\$2.60

(D) 6V ALKALINE BATTERY

No L1016/11A. Dimensions: 9.5mm dia x 15mm high. See photo "D".

7	Cat.	Qty 1+	Qty 10+	Qty 20+
	SB-2421	\$2.95	\$2.60	\$2.30

(E) 9V ALKALINE BATTERY - GP29A/L822 TYPE

General purpose remote control battery. Dimensions: 7.7(dia) x 21.4(L)mm

Capacity 18mAh. See photo "E".

7	Cat.	Qty 1+	Qty 10+	Qty 20+
	SB-2427	\$3.95	\$3.45	\$3.15

12V ENERGIZER ALKALINE

Car alarm remote battery. (Energiser brand). Size 9.5mm dia x 27mm high.

Part # A23 Energizer

7	Cat.	Qty 1+	Qty 10+	Qty 20+
	SB-2376	\$3.19	\$2.75	\$2.45

ZINC CHLORIDE

Eclipse Lantern Battery

A 6 volt heavy duty battery as used in many torches including the very popular Dolphin.

Carbon zinc battery

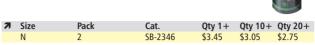


7	Cat.	Qty 1+	Qty 10+	Qty 20+
	SB-2394	\$5.45	\$4.90	\$4.30

N Size Extra Heavy Duty Zinc Chloride - Vinnic

These batteries are superior to standard carbon-zinc cells but are much cheaper and have a longer shelf life

Blister Packed



Cordless Telephone Batteries - Extended Range

Replacement batteries for cordless telephones.

3.6V 600mAh Ni-MH

- Nominal voltage 3.6V Nominal capacity 600mAh
- Bank of three batteries next to each other
 Dimensions: 30(H) x 14(W) x 41(L)mm
- Supplied with lead and two pin Mitsumi plug. Suits Panasonic KXT3716, 3806, 3826, 4026, 4027, 4036, 4046, 4047, 4300 & 4317
- Uniden CT301, XC360, XC310, XC320, XC340, XC610
 Also suits various Sony & James Hardie phones.

7	Cat.	Qty 1+	Qty 10+	Qty 20+
	SB-1645	\$18.95	\$16.95	\$14.95

3.6V 600mAh Ni-MH

- Nom voltage 3.6V
 Suitable for Goldtron P-600B DECT / Replaces original GP battery (GP60AAH3BM) Telstra Freedom 70

7	Cat.	Qty 1+	Qty 10+	Qty 20+
	SB-1644	\$19.95	\$17.70	\$15.70



3.6V 650mAh Ni-MH

- Nominal voltage: 3.6V
 Suitable for Panasonic KXTC1220/KXTC1230
- GP Battery No. GP65AAAH3BMS

7	Cat.	Qty 1+	Qty 10+	Qty 20+
	SB-1646	\$19.95	\$17.70	\$15.70

3.6V 1000mAh Ni-Cd

- Nominal voltage: 3.6V
- Suitable for Panasonic KX-TC1801 KT-TC1890
- GP Battery No. GP100AAS3BMS

7	Cat.	Qty 1+	Qty 10+	Qty 20+
	SB-1648	\$19.95	\$17.70	\$15.70



3.6V 910mAh Ni-MH

- Nom voltage 3.6V
- Suitable for Uniden WDECT2315 WDECT2310,
- DSS5805, 5855, 5865
 GP battery No. GP85AAALH3BMS

7	Cat.	Qty 1+	Qty 10+	Qty 20+
	SB-1634	\$28.95	\$25.95	\$22.95



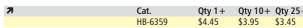
4 x AA Battery Container

PACK OF 2

Handy battery containers to store your AA batteries. Perfect for every digital camera owner who should have a spare set of batteries, charged and ready to go. Each container holds up to 4 x AA batteries and measure only 65mm wide, easily fitting in the pocket, purse or camera bag

 One red and one blue supplied.





LITHIUM BATTERIES

Eclipse Lithium 1.5V AAA & AA Batteries

Lithium Iron (Li Fe) batteries pack 5-6 times the capacity of alkaline equivalents. Using these represents a 40-60% cost saving over alkaline batteries.

Not rechargeable.

AAA Specifications	
Rated terminal voltage	1.5V
Internal impedance	420 m Ω
Rated capacity	1200mAh
Continuous load	600mA
Storage life	10 years

Pkt 2: SB-2364 Pkt 4: SR-2365





AA Specifications	
Rated terminal voltage	1.5V
Internal impedance	280 m Ω
Rated capacity	2900mAh
Continuous load	1500mA
Storage life	10 years
DI - 2 CD 22CC	



RENEWABLE ENERGY

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7	Pkt.	Cat.	Qty 1+	Qty 8+	Qty 15+
AAA	2	SB-2364	\$7.95	\$6.95	\$6.25
AAA	4	SB-2365	\$11.95	\$10.70	\$9.50
AA	2	SB-2366	\$7.95	\$6.95	\$6.25
AA	4	SB-2367	\$11.95	\$10.70	\$9.50

1.5V Lithium Long Lasting Batteries



The perfect power source for high drain current draw cameras, camcorders, personal stereos, mobile phones, palm top computers and TVs.

• Up to 3 times the life of any alkaline battery.

- Up to 10 times the life of ordinary carbon zinc battery
- Guaranteed shelf life up to 10 years. 1.5V, 1.4Amp hour (AA).
- Blister Packed
- · Not rechargeable

Made in
Japan



7	Pkt.	Cat.	Qty 1+	Qty 8+	Qty 15+
AAA	2	SB-2372	\$13.50	\$11.95	\$10.70
AA	2	SB-2375	\$13.50	\$11.95	\$10.70

Eclipse Lithium 9V Battery 1200mAh

As you know, lithium batteries are essential for such things as smoke detectors, wireless alarm systems, garage door opener remotes etc. They are a bit more expensive, but your family's lives are worth a couple of bucks. Available in single or twin pack:

· Not rechargeable

Please note that the physical size of these batteries is slightly different to standard 9V batteries.



		— 20.0 ———	P1		-
7	Pkt.	Cat.	Qty 1+	Qty 8+	Qty 15+
9V	Single	SB-2397	\$14.95	\$13.35	\$11.70
9V	2	SB-2396	\$24.95	\$22.35	\$19.70

LITHIUM CAN BE DANGEROUS

There are basically two types of lithium batteries: rechargeable and non-rechargeable. Rechargeable batteries are usually referred to as Lithium-Ion or Lithium Polymer. The ONLY WAY to recharge such batteries is with a dedicated charger for the particular battery size, such as CRV-3 or CR123A types. Such chargers are specifically designed to strictly manage the special charge rate requirements for rechargeable lithium ion or lithium polymer

Standard Lithium non-rechargeable batteries are not designed to be recharged - even with a Lithium-Ion or Lithium-Polymer charger. Indeed there is a VERY HIGH likelihood that the battery will violently EXPLODE if any attempt is made to charge a standard Lithium battery.

DO NOT try to recharge ANY lithium battery with an undedicated charger, such as lead acid or Ni-Cd charger, under any circumstances.

All batteries on this page are non-rechargeable. Do not try to recharge any of these lithium batteries.

CR123A 3V Lithium **Batteries - 6 Pack**

Contains 6 CR123A lithium camera batteries, commonly used in LED torches and cameras

Not rechargeable



7	Pkt.	Cat.	Qty 1+	Qty 8+	Qty 15+
CR-123A	6	SB-2324	\$17.95	\$15.95	\$14.35

Energizer Lithium Camera Batteries

Not rechargeable



MADE III	Cat.	Type	VOIL	Current	
JAPAN	SB-2377	CR123A	3V	1500mA	
	SB-2378	CR2	3V	800mA	
Cat.	Q1	ty 1+	Qty 8	+ Qty	15+
SB-2377	\$1	9.95	\$17.7	0 \$15	.70
Cat	04	h. 1 1	0+110	1 Otv	1E :

\$22.95

Lithium Camera Batteries

Blister Packed

SB-240

SB-2378





\$20.35

).	4 SB-	2401	SE	SB-2402			
	Cat.	Туре	Volt	Current			
	SB-2400	CR123A	3V	1300mA			
	SB-2401	CR-P2	6V	1300mA			
	SB-2402	2CR5	6V	1300mA			
	SR-2404	CR2	3V	750mA			

7	Cat.		Qty 1+	Qty 8+	Qty 15+
	SB-2	2400	\$4.95	\$4.45	\$3.90
	SB-2	2401	\$9.95	\$8.75	\$7.75
	SB-2	2402	\$9.95	\$8.75	\$7.75
	SB-2	404	\$4.95	\$4.45	\$3.90

GIFT CARD

Freecall order hotline: 1800 022 888

Can't find what to buy? Give a Jaycar Gift card and let them choose!



COMPUTER BACKUP

3.6V Lithium Computer Backups



These high capacity batteries are used in many desktop and notebook computers to retain date, time and

configuration information while the computer is switched off. They are also useful where long shelf life is important or when the battery is to be fitted into difficult or sealed access areas. Storage life is up to 10 years.

• 14.5mm diameter

Not rechargeable

)	Cat. Size		Capacity (mAh)	Max Current (mA)		Height Connect (mm)		
	SB-1770	Half AA	900	50		25mi	m Nipple	
	SB-1771	Half AA	900	50		25mm Axial Lea		ead
	SB-1774 AA		2000	100		50mm Nipple		
	SB-1775 AA		2000 100		50mm Axial Lead		ead	
	7 Cat. SB-1770 SB-1771		Qt	y 1+	Qty 1	10+	Qty 20+	-
			\$1	1.95 \$10.7		70	\$9.50	
			\$13	3.95	\$12.3	35	\$10.95	
	SB-	1774	\$10	6.95	\$14.9	95	\$13.35	
	SB-	1775	\$18	8.95	\$16.9	95	\$14.95	

Computer Memory Backup Batteries



AA LITHIUM EXTERNAL BATTERY

This battery (unlike cheaper imitations) uses one AA lithium cell, is encapsulated and designed for external mounting. Its supplied with a lead and Berg flat plug. Voltage is 3.6V. 2.1Ah.

CRHZU

- Supplied with Velcro mounting strip.
 Dimensions: 61(L) x 17(H) x 16(W)mm.
 Not rechargeable.

7	Cat.	Qty 1+
	SB-2412	\$19.95

3.6V Lithium

Supplied with PC mount pins.

 Not rechargeabl 	e.	-
Specifications	A	STREET, SQUARE, SQUARE
Operating voltage	3.6 to 3.7V	STATE OF THE PARTY OF
Termination voltage	2.5V	
Pin spacing	25mm	
Capacity	0.6Ah to plus 85°C	
Temperature	minus 40°C	
Storage period	10 years.	
Dimensions	24(W) x 14(Dia)mm.	
7 Cat.	Qty 1+ Qty	10+ Qty 20+

SB-2540 \$15.95 \$14.35 \$12.70

All the batteries on this page are non-rechargeable. Do not try to recharge any of these lithium batteries.

Batteries - Button Cell

BATTERY TYPE COMPARISON

TYPE (CHEMISTRY)	COMMON NAME(S)	NORMAL CELL VOLTS	INTERNAL RESISTANCE	MAXIMUM DISCHARGE RATE	PROS & CONS	TYPICAL APPLICATION
Carbon-Zinc	Standard Duty	1.5	MEDIUM	MEDIUM	Low cost, available in various sizes; but terminal voltage drops steadily during cell life.	Torches, radios, toys, & general purpose, electronic equipment.
Zinc Chloride	Heavy Duty	1.5	LOW	MEDIUM TO HIGH	Low cost, better at higher discharge rates & at lower temperatures; terminal voltage still drops.	Cassette tape players/recorders & other motor-driven items, clocks, calculators, remote controls, multimeters, etc.
Alkaline - Zinc- Manganese Dioxide	Alkaline	1.5	VERY LOW	HIGH	Better for high continuous or pulsed loads and at low temperatures; but terminal voltage again drops.	Heavy duty torches, photoflash units, battery shavers, digital cameras, hand-held transceivers, portable CD players etc.
Lithium- Manganese Dioxide	Lithium	3.0	LOW	MEDIUM TO HIGH	High energy density, very low self-discharge rate (excellent shelf life) good temperature tolerance.	Watches, calculators, cameras (digital & film), DMMs, and other test instruments.
Zinc-Mercuric Oxide	Mecury Cel	1.35	LOW	LOW	High energy density (compact); very flat discharge curve; good at higher temperatures.	Calculators, pagers, hearing aids, watches, test instruments (voltage reference).
Zinc-Silver Oxide	Silver Oxide Cell	1.5	LOW	LOW	High energy density (very compact); very flat discharge curve; reasonable at lower temperatures.	Calculators, pagers, hearing aid, watches, test instruments (voltage reference).
Zinc-Oxygen	Zinc Air Cell	1.45	MEDIUM	LOW	High energy density, very lightweight; flat discharge curve; but must have access to air.	Hearing aids and pagers.

BUTTON CELL BATTERIES

1.5V Silver Oxide Batteries

These batteries generally have a protective layer of silicon on them. Please wipe with a cloth and avoid touching with fingers before installing them.

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Тур	e #Capacity	Eveready	Vinnic	Maxell	IEC	Other	Pk.	Dia x H(mm)	Cat.	Qty 1+	Qty 8+	Qty 15+
357	155mA	357	S1154E	SR44W	SR44	613/RW12/32/S1154S	ea	11.6 x 5.4	SB-2512	\$1.95	\$1.75	\$1.55
362	21mA	362	S721E	S721SW	SR58	SG11/SR720/532/19/RW310	ea	7.9 x 2.1	SB-2530	\$1.95	\$1.75	\$1.55
364	20mA	364	S621E	S621SW	SR60	SG1/SR620/531/31/RW320	ea	6.8 x 2.1	SB-2501	\$1.95	\$1.75	\$1.55
371	44mA	-	-	SR920SW	SR69	SG6/537/30/RW315	ea	9.5 x 2.1	SB-2534	\$1.95	\$1.75	\$1.55
377	27mA	-	-	SR626SW	SR66	SG4/37	ea	6.8 x 2.6	SB-2504	\$1.95	\$1.75	\$1.55
389	60mA	-	-	SR1130SW	SR54	RW49/AG10/G10/SG10/554	ea	11.6 x 3.05	SB-2508	\$1.95	\$1.75	\$1.55
391	40mA	-	-	SR1121W	SR55	SG8/68/553/28/RW40	ea	11.6 x 2.1	SB-2542	\$1.95	\$1.75	\$1.55
392	38mA	-	-	SR41W	SR41	SG3/63/547/2/RW27/RW47	ea	7.9 x 3.6	SB-2502	\$1.95	\$1.75	\$1.55
393	65mA	-	-	SR754W	SR48	SG5/65/546/15/RW28/RW48	ea	7.9 x 5.4	SB-2532	\$1.95	\$1.75	\$1.55
396	25mA	-	-	SR726W	SR59	SG2/556/29/RW411	ea	7.9 x 2.6	SB-2510	\$1.95	\$1.75	\$1.55
399	42mA	-	-	SR927W	SR57	SG7/SR926/543/35/RW413	ea	9.5 x 2.7	SB-2536	\$1.95	\$1.75	\$1.55

1.5V Alkaline Batteries

Type #	Capacity	Eveready	Vinnic	Maxell	VARTA	Other	Pk.	Dia x H(mm)	Cat.	Qty 1+	Qty 8+	Qty 15+
LR936 NEW	45mA		-	LR45		AG9	ea	9.5 x 3.6	SB-2513	\$1.50	\$1.35	\$1.20
LR43	90mA	166	-	LR43	V12GA	-	ea	11.6 x 4.2	SB-2514	\$1.50	\$1.35	\$1.20
LR44	120mA	A76	-	LR44	V13GA	357A	ea	11.6 x 5.4	SB-2516	\$1.50	\$1.35	\$1.20
LR44 (Eveready)	120mA	LR44	-	LR44	V13GA	357A	Pk.2	11 x 5	SB-2518	\$5.25	\$4.60	\$4.15
L1121	120mA	391	L1121	LR1120	V8GA	D191A	ea	11.6 x 2.2	SB-2519	\$1.50	\$1.35	\$1.20

3V Lithium Batteries

- Not rechargeable.Capacity: 270mAh
- Dimensions: 24.5 x 3.0mm

Type #	Capacity	Pk.	Dia x H(mm)	Cat.	Qty 1+	Qty 8+	Qty 15+
CR1220	30mA	ea	12 x 2.0	SB-2527	\$2.95	\$2.60	\$2.30
CR1616	45mA	ea	16 x 1.5	SB-2525	\$2.95	\$2.60	\$2.30
CR1620	50mA	ea	16 x 2.0	SB-2526	\$2.95	\$2.60	\$2.30
CR1632	150mA	ea	16 x 3.2	SB-2529	\$2.95	\$2.60	\$2.30
CR2016	60mA	ea	20 x 1.6	SB-2524	\$2.95	\$2.60	\$2.30
CR2025	110mA	ea	20 x 2.5	SB-2520	\$2.95	\$2.60	\$2.30
CR2032	140mA	ea	20 x 3.2	SB-2522	\$2.95	\$2.60	\$2.30
CR2450 (Eveready)	575mA	ea	25.5 x 5.0	SB-2521	\$7.75	\$6.75	\$5.95
CR2430	270mAh	ea	24.5 x 3.0	SB-2523	\$2.95	\$2.60	\$2.30

All in One Battery Tester

Here's a modern day battery tester to suit all your needs. This handy unit will test all types of batteries currently out there on the market including standard AA/AAA/C/D/9V batteries, button cells and lithium batteries such as those used in digital cameras. The LCD indicates the level of capacity so you'll never get caught out on a day trip with 1/2 flat batteries in your digital camera

• One product to test all those batteries in your kitchen drawer before use!!

> Cat. Qty 10+ QP-2253

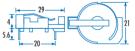
Batteries not included

Standard Button Cell Holder

PCB mount holder, suits button cells, with diameter up to 20mm, which includes the 3V lithium batteries.

Capacity Part No.

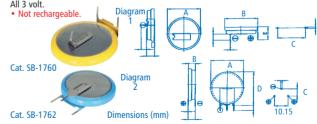




7	Cat.	Qty 1+	Qty 10+	Qty 25+
	PH-9238	\$1.95	\$1.75	\$1.55

3V PCB Mounting Lithium Coin Batteries

Two of the most popular solder-in PCB mounting type batteries. All 3 volt.



Diag. Cat.

200)mAn	CR2032	۷C	2	2R-1/62	20	3.2	3.5	21
400)mAh	CR2430	-HC-33	1	SB-1760	24.5	24.7	17.8	9.45
540)mAh	CR2540	NRH	2	SB-1622	24.5	24.5	17.8	11.35
7	Part No.		Capacit	tv	Cat.	0	ty 1+ (Qty 10+	Otv 20+
	600.400			,				. ,	. ,
	CR2430-	HC-33	400mAl	h	SB-1760	\$	3.95	\$3.45	\$3.15
	CR2430-		400mAl 200mAl		SB-1760 SB-1762				\$3.15 \$1.95

	MB-3502	MB-3564 NEW	MB-3549	MB-3561 NEW	MB-3568	MB-3551	MB-3505	MB-3545	MB-3632	MB-3639	MB-3581
12VDC			*	*		*			*	*	*
240VAC		*	*	*	*	*	*	*		*	*
Alkaline					*						
Ni-MH		*	*	*	*	*	*	*	*	*	
Ni-Cd	*	*	*	*	*	*	*	*	*	*	
Li-ion									*	*	*
Li-Po									*		
AAA		*	*	*	*	*	*	*		*	
AA	*	*	*	*	*	*	*	*		*	
С							*	*			
D							*	*			
9V						*	*	*		*	
USB OUTLETS										1	
FAST CHARGE		*		*				*			*
DISCHARGES						*	NOT 9V				*
PAGE NUMBER	372	372	372	372	372	372	372	373	375	374	374

AAA & AA CHARGERS

4 x AA Solar Battery Charger

The solar panel in the lid will charge up to 4 x AA Ni-Cd in a fairly short time. It is ideal for yachts, campers or anywhere 240V is not available. It is no dearer than an ordinary Ni-Cd charger but takes about the same time to charge in reasonable sunlight.

• Dimensions: 67(W) x 30(H) x 96(D)mm



Fast Ni-MH/Ni-CD Battery Charger

Suitable for charging 1 to 4 AA or AAA Ni-MH/Ni-Cd rechargeable batteries. Features over-current, over-heat and over-voltage protection with the ability to detect non-rechargeable, short-circuited or defective batteries. Plugs directly into a mains power point.



- 600mA charging current Plugs directly into 240VAC mains outlet
- 4 LED indication

REDEMBBLE ENERGY

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• Dimensions: 100(L) x 64(W) x 25(H)mm

•	MB-3564		\$13.35	
2 Hour Fast Charger For /	Δ/ΔΔΔ Νί_	MH Rat	tarias	

Recharge up to four AA or AAA Ni-MH batteries. This handy charger, which utilises Delta V voltage detection, charges batteries to their optimal level to ensure long life. Charge state can be monitored on the integrated electric blue LCD. Charge on the go with the car cigarette lighter cord included as well as the mains plugpack.

- · Easy to read and backlit LCD
- Includes bad cell detection
 Charge at the home, office or on the road
- Delta V detection and cut-off

- 1150mA charging current for AA batteries
 600mA charging current for AAA batteries
 Supplied with mains plugpack and car charging cable
 Dimensions: 105(L) x 68W) x 30(H)mm

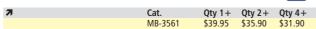
7	Cat.	Qty 1+	Qty 2+	Qty 4+
	MB-3549	\$29.95	\$26.90	\$23.70

60 Minute Fast Charger with USB Port

Recharge up to 4 x AA or AAA Ni-MH or Ni-Cd batteries fast with this handy charger. Using Delta -V voltage detection, 4 individual channels and an auto cut-off safety timer, the batteries are charged to their optimal levels to ensure longest life with added protection. Also features smart LED indicators that show the charging status for each

channel. Loaded with a USB port capable of 2.1A, great for charging gizmos such as digital cameras, GPSs, smart phones, iPhones® or power hungry iPads® and tablets. Supplied with a 240VAC adaptor and a 12VDC adaptor.

- Delta -V controlled
- Temperature sensor
- Suitable for 1-4 AA or AAA batteries
- Defective, non rechargeable battery detection Charge current 2200mA for AA, 850mA for AAA
- Dimensions: 114(L) x 75(W) x 30(D)mm



Alkaline/Ni-Cd/Ni-MH Battery Charger

Contrary to popular belief, it is actually possible recharge alkaline batteries as long as they aren't completely dead.

Now you can recharge AA or AAA alkaline batteries 10-20 times depending on their quality, age and condition as well as recharge Ni-Cd or Ni-MH batteries. Recharging 4 x AA top brand name batteries just 10 times will more than pay for the cost of this charger, you will certainly get your money's worth! LEDs indicate charge status and the on-board electronics prevent overheating or overcharging.

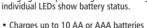
- Charges up to 4 x AA or AAA alkaline,
- Ni-Cd or Ni-MH batteries
 Microprocessor controlled to prevent overcharging
- Individual charge circuits for each cell Maximum output current: 350mA (x4)
- Safety timer cutout
- Mains powered
 Dimensions: 71(W) x 118(H) x 30(D)mm



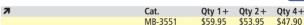


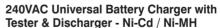
12VDC & 240VAC Smart Battery Charger Ni-Cd & Ni-MH

This microprocessor controlled charger will accept a combination up to 10 x AA or AAA cells and 2 x 9 volt batteries. The integrated discharger can fully flatten the battery before charging to help minimise memory effects. Uses Delta V sensing to achieve the maximum charge. A maximum charging timer protects against overcharging &



- Charges up to 10 AA or AAA batteries
 Also charges 9 volt batteries
- Mains power adaptor supplied
- Dimensions: 220(W) x 40(H) x 115(D)mm





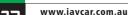
This is an economical unit that can now charge Ni-MH batteries as well as Ni-Cd batteries (Yes, even 9V Ni-MH). It has a discharge function for proper Ni-Cd battery cycling & battery tester for 1.2 & 1.5V

- Recharges AAA, AA, C, D & 9V batteries LED indicator on each charging
- Recharges batteries in singles or in groups
 Includes battery tester for 1.2V to 1.5V cells
- Accepts various combinations of batteries
- Operates from 240V mains socket
- Energy Authority approved
 200(W) x 50(H) x 95(D)mm
- Will not discharge 9V batteries









Freecall order hotline: 1800 022 888

Ni-MH Batteries & Chargers

AAA, AA, C, D, 9V CHARGERS (CONTINUED)

12VDC & 240VAC Battery Charger with LCD

Recharge up to 4 x AA, AAA, C, D and 2 x 9V Ni-Cd or Ni-MH batteries together for a total of 6 batteries. Using Delta V voltage detection and cut-off, batteries are never overcharged and each managed fully through the charging process with the LCD keeping you informed during the process. Powerful enough to get modern day high capacity Ni-MH batteries charged quick enough and the ability to charge most battery types make this a charger handy for anyone with a lot of rechargeable batteries. Sleek modern design.

- Easy to read and backlit LCD (4 main channels shown)
- · LED charging indicator for all 6 batteries
- Charge at the home, office or on the road
- · Delta V detection and cut-off
- 4 charging channels (max 6 batteries charging simultaneously)
- Discharge function for Ni-Cd batteries 1000mA charging current for AA, C & D batteries

- 500mA charging current for AAA batteries
 13mA charging current for 9V
 Supplied with mains plug pack only, for in-car operation use PP-1996 power lead Qty 2+

\$53.95



NICKEL METAL HYDRIDE RECHARGEABLE BATTERIES

MB-3545

Nickel Metal Hydride (Ni-MH) batteries offer superior features to nickel cadmium (Ni-Cd) rechargeable batteries. These features include:

- No memory effect
- Higher current capacities
- High drain performance





SR-1708







SB-1728**

Qty 4+

\$47.90

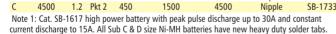






Size	Current Capacity mAh		Per	Charging Rate Slow 15 Hours	Charging Rate Standard 5 Hours	Charging Rate Fast 1.5 Hours	Terminal Type	Cat. No.	Qty 1+	Qty 8+	Qty 15+
AAA	900	1.2	EA	90	270	900	Nipple	SB-1723	\$2.95	\$2.60	\$2.30
AAA	900	1.2	EA	90	270	900	Solder tabs	SB-1724	\$3.95	\$3.45	\$3.15
AA	2000	1.2	EA	200	650	2000	Nipple	SB-1706	\$4.25	\$3.75	\$3.30
AA	2000	1.2	EA	200	650	2000	Solder tabs	SB-1708	\$4.45	\$3.95	\$3.45
AA	2400	1.2	EA	240	750	2400	Solder tabs	SB-1728	\$4.95	\$4.45	\$3.90
AA	2500	1.2	EA	260	800	2500	Nipple	SB-1744	\$5.95	\$5.25	\$4.75
Blister	Packs										
AAA	900	1.2	Pkt 4	90	270	900	Nipple	SB-1739	\$10.95	\$9.75	\$8.75
AA	2000	1.2	Pkt 4	200	650	2000	Nipple	SB-1737	\$14.95	\$13.35	\$11.70
AA	2400	1.2	Pkt 4	240	750	2400	Nipple	SB-1735	\$16.95	\$14.95	\$13.35
AA	2500	1.2	Pkt 4	260	800	2500	Nipple	SB-1738	\$16.95	\$14.95	\$13.35
4/3 A	3500	1.2	EA	350	1050	3500	Solder tabs	SB-1711	\$12.95	\$11.35	\$10.35
SUB C	3300	1.2		350	670	3300	Solder tabs	SB-1611	\$8.95	\$7.95	\$6.95
D	5000	1.2	EA	500	1500	5000	Nipple	SB-9010	\$12.95	\$11.35	\$10.35
D	9000	1.2	Pkt 2	900	3000	9000	Nipple	SB-1734	\$36.95	\$33.45	\$29.45
D	9000	1.2	EA	900	3000	9000	Solder tabs	SB-2462	\$23.95	\$21.35	\$18.95
4/3 A	900	1.2	EA	90	270	900	Solder tabs	SB-1717	\$4.95	\$4.45	\$3.90
SUB C		1.2	EA	270	900	2700	Solder tabs	SB-1613	\$8.95	\$7.95	\$6.95
	2400¹	1.2		240	740	2400	Solder tabs	SB-1617	\$6.95	\$6.25	\$5.50
Q\/	200	Ω /	EΛ	20m A	60m A		Clin	CR_2/167	¢11 Q5	¢10 70	¢a 50

4500



POWERTECH SB1711 4/3A HI-M SB-1711 C **SUB C** SB-1617 SB-1733 D



SB-9010 SB-1734 SB-2462 SB-2467

NICKEL CADMIUM (Ni-Cd) RECHARGEABLE BATTERIES

Ni-Cd Rechargeable Battery Sub C

450

1.2 Pkt 2

Specifications	
Size	SUB C
Current Capacity	1800mAh
Voltage	1.2V
Charging rate standard	180mA for 14-16 hours ¹
Charging rate Fast 4-5 hours1	600mA
Terminal type	Solder tabs



Nipple

SB-1733

Note 1: At 20°C

4500

Note 2: Similar to batteries used in the Braun electric toothbrush (2 required).

7	Cat.	Qty 1+	Qty 8+	Qty 15+
Each	SB-2468	\$6.95	\$6.25	\$5.50



DID YOU KNOW...

William Henry (1773 - 1841)

Henry's Law states that the amount of gas absorbed by water increases as the gas pressure rises.

NI-MH COMPUTER MOTHERBOARD BATTERIES

Varta Ni-MH Computer Motherboard Backup Batteries

• Long life up to 6 years at 20°C

\$15.95

\$14.35

- Low self discharge
- 1,000 charging cyclesInterchange compatibility with Ni-Cds

\$7.95

· Continuous overcharge capacity

2 4V 80MAH

SB-1608

\$17.95

Dimensions: 15.5 dia x 12Hmm





✓VARTA



Rechargeables, Testers & Chargers

High Discharge 3300mAh Ni-MH Sub C Battery

Perfect replacement for Ni-Cd batteries in power tools and other battery packs. This high discharge Sub C can discharge at over 40A making it clearly superior to the old Ni-Cd technology, effectively making it obsolete. Supplied fitted with quality solder tabs to make into battery packs (can be charged with MB-3630) either as replacements for Ni-Cd batteries or for new projects.



Qty 8+ Otv 15+ \$8.95 \$7.95 SB-1611

Long Life Pre-Charged Rechargeable Batteries - 1.2V

Like the Sanyo eneloop batteries, these have all the benefits of disposable batteries, but are rechargeable -they feature ultra-low self-discharge technology so they can be used immediately after purchase. They retain 85% of initial capacity after 1 year of storage, are environmentally friendly and are ideal for the most

demanding of modern digital devices. • 4 packs available, supplied in a protective storage case.



7	Type		Cat.	Qty 1+	Qty 8+	Qty 15+
	AAA	4 Pack - 800mAh Nipple	SB-1752	\$14.95	\$13.35	\$11.70
	AA	4 Pack - 2000mAh Nipple	SB-1750	\$19.95	\$17.70	\$15.70
	Sub C	Single - 3000mAh Solder Tags	SB-1759	\$8.95	\$7.95	\$6.95
	AA	Single - 2000mAh Solder Tags	SB-1751	\$6.95	\$6.25	\$5.50

BATTERY TESTERS

RENEWABLE ENERGY

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All in One Battery Tester

Here's a modern day battery tester to suit all your needs. This handy unit will test all types of batteries currently out there on the market including standard AA/AAA/C/D/9V batteries, button cells and lithium batteries such as those used in digital cameras. The LCD indicates the level of capacity so you'll never get caught out on a day trip with 1/2 flat batteries in your digital



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	OP-2253	\$23.95	\$21.35	\$18.95

Battery / Bulb / Fuse Tester

Battery tester with fuse and bulb checker. Tests AAA, AA, C, D (1.5V) & 9V batteries on the easy-to-read, colour-coded analogue display. It checks bulbs and fuses, giving a 'good' or 'replace' indication, and will also test large 1.5V button batteries like the LR-44. There is also a handy compartment to store spare fuses, bulbs and button cells.

- Measures: 150mm long
- Uses 9V Battery (included).



QP-2252 \$9.95 \$8.75 \$7.7	j

Battery Bank 4 x AA with USB Socket & Switch

Provides 5VDC power though the USB socket by using 4 x AA batteries. The unit makes a superb back-up charger for any USB powered device such as an MP3 player or PDA and also features a slide on/off switch.



Qty 1+ Qty 10+ Qty 25+ MP-3083

Freecall order hotline: 1800 022 888

LI-ION RECHARGABLE BATTERIES & CHARGERS

Rechargeable Li-Ion Battery 3.7V 2200mAh (18650)

18650 Li-lon battery commonly used in LED torches.

Suitable replacement for our CREE® torch ST-3453/ST-3480.





Cat. SR-2403 \$17.70

Rechargeable 3V CR123

Rechargeable CR123A 650mAh battery

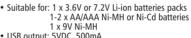
Use charger MB-3581



7	Cat.	Qty 1+	Qty 10+	Qty 20+
	SB-2411	\$13.95	\$12.35	\$10.95

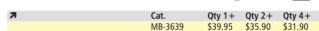
Universal Li-ion/Ni-Cd/Ni-MH Battery Charger

Cleverly designed charger to charge various Li-ion battery packs, as well as AA, AAA or 9V Ni-MH and Ni-Cd rechargeable batteries. Housed with a spring loaded cover for clamping down batteries, two Delta-V controlled single cell channel and two adjustable contact pins which are polarity sensing for that added convenience. A USB port on the side accommodates the charging needs for your iPhone®, Smartphone or any USB power device. Topped off with an LCD for displaying the battery type, voltage and charge status. Perfect for digital camera, cordless phone and MP3 player batteries. The charger is supplied with both mains and car



 USB output: 5VDC, 500mA Dimensions: 120(L) x 62(W) x 35(H)mm

Note: Batteries not included



Lithium Ion CR123A Battery & Charger

CR123A batteries are commonly used in some LED torches and many cameras but the cR123A batteries are commonly used in some LED totales and many cameras but the replacements are expensive. Now there's a rechargeable option with this lithium-ion CR123A battery & matching charger. Normally, Li-ion batteries have a nominal voltage of 3.7V, which being higher than a normal CR123 battery can damage the sensitive circuitry of LED torches and cameras - but this battery is different! The battery features smart circuitry inside that drops the voltage to 3.0V under load, making it perfectly safe to use with sensitive electronics that normally use a 3.0V CR123 battery. The intelligent design will fully recharge the included battery in about 3 hours and shows an LED charge status indicator.

- · Automatic charge control
- Short circuit & over voltage protection
- · Supplied with mains plugpack and car charging cable Smart battery technology keeps nominal voltage to 3.0V

90(L) x 40(W) x 25(H)mm

Replacement CR123A 650mAh battery Cat. SB-2411 sold separately

NOTE: BATTERY INCLUDED

CR123A Charger

CR123A Battery

Specifications Battery voltage Charge time 3 hours 12VDC Charger input





SB-2411

MB-3581

Cat.	Qty 1+	Qty 2+	Qty 4+
MB-3581	\$29.95	\$26.90	\$23.70
Cat.	Qty 1+	Qty 10+	Qty 20+
SB-2411	\$13.95	\$12.35	\$10.95

Rechargeable Batteries & Chargers

RECHARGEABLE RC BATTERIES & CHARGERS

6.0V 1600mAh Ni-MH RC Receiver Battery Pack

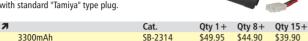
This high capacity rechargeable Ni-MH battery pack is a perfect solution to constantly replacing the receiver batteries in your RC car. Has five 1.2V 1/3A 1600mAh cells, and are fitted with standard 2-pin JST connectors

- Hump Pack STYLE
- Dimensions: 52 x 32 x 32mm
- 60mm lead



7.2V Ni-MH 3300MAH Stick **Pack RC Battery**

High capacity, high current discharge Ni-MH packs for radio control cars. Fitted with standard "Tamiya" type plug.



Li-Po Battery Balance Charger

fl you're into RC cars, you know that balance Li-Po chargers can be very expensive. This one offers a budget alternative without sacrificing performance. 2S and 3S battery sockets for common RC battery packs with LED charge status indication.

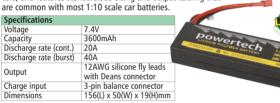
Includes mains power supply.

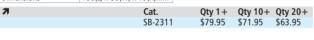
Specifications	
Input voltage	10 - 18VDC
Output voltage	8.4V (2S), 12.6V(3S)
Charge current	1.1A
Dimensions	80(L) x 52(W) x 24(D)mm

7	Cat.	Qty 1+	Qty 2+	Qty 4+
	MB-3636	\$29.95	\$26.90	\$23.70

7.4V 3600mAh Lithium-Polymer Battery Pack

Lithium-Polymer (Li-Po) batteries are frequently found in most modern mobile phones and portable electronic devices. They offer excellent performance compared to Ni-MH and Ni-Cd batteries and can be consistently charged and discharged at a much higher rate. They are also smaller and weigh far less than their nickel based predecessors. This particular battery pack is the perfect upgrade for 1:10 scale electric remote control cars, and features standardised sizing and output cabling that





Universal Programmable Balanced Battery Charger

The last word in battery chargers. Particularly suited to radio control hobbies, it charges, discharges and balances Li-Ion, Li-Po, Ni-Cd, Ni-MH and lead-acid batteries. Li-Po batteries are balance-charged so there's no risk of damage or explosion from incorrect charging. The charging cycle is programmable and the whole process, or the charging of each individual cell can be monitored on the LCD screen. It can be powered with a mains plugpack or directly from a 12V battery or any other DC source from 10 - 18 volts. You'll need a fairly beefy mains supply capable of supplying about 5 amps. A variety of adaptors are included - glow plug, alligator clip, 2 and 3 pin battery packs and it also features balance charge connectors on the main housing

- Charging capacity:
 Up to 15 Ni-Cd or Ni-MH cells
 2, 3, 4, 5 or 6 cell Li-Po packs
 2 20V lead-acid
- Charge current: 0.1-5.0A
- Discharge current: 0.1-1.0A Current drain for balancing Li-Po: 300mAh/cell
- Microprocessor controlled
- Delta V charging detection
- 2, 3, 4, 5 and 6 cell balanced charging outputs
 Recommended mains power supply Cat. MP-3243
- Dimensions: 132(L) x 82(W) x 28(H)mm

MB-3632 \$89.95

Universal Charger for Cordless Power Tools (4.8-24V)

Have a cordless power tool and can't find the charger? If it has a Ni-MH or Ni-Cd battery then this charger will solve your problem. It

features intelligent non-polarity operation, which automatically detects the polarity and voltage of your battery and charges it accordingly. Just connect the strong magnetic or alligator clip connectors to your battery and this smart charger will do the rest. It

incorporates two status LEDs, one indicating that the battery is charging and the other indicates once it is full.

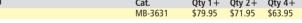
Includes:

- Power adaptor: 100-240VAC to 12VDC 3.0A 1.5M long cable Cigarette plug (for in car use) 1.5m long cable
- Alligator battery connecter lead 270mm long
- Magnetic battery connecter lead 290mm long Charger base unit 197(L) x 74(W) x 39(H)mm

Note: Battery not included

Specifications	
Input Voltage	100-240VAC (power adaptor) or 12VDC (cigarette plug)
Battery Voltage	4.8 / 7.2 / 9.6Volts (@ 1.7A), 12 / 14.4 / 18 Volts (@1.35A), 19.2 / 24 Volts (@ 1.0A)
Charging time	1-3 Hours - depends on battery capacity





BATTERY HOLDERS

AAA Size

These holders are moulded in Delrin with corrosive resistant nickel plated springs and studs.

• All have connection wires 150mm long, unless marked • OEM quantities of holders with special configurations available.

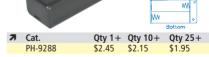
1 X AAA W Cat. Qty 1+ Qty 10+ Otv 25+

















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Auto & Outdoors

Torches, torches, torches. We never seem to stop finding new and exciting LED torches. Even more exciting than this is perhaps the 2500 lumen HID torch at under \$200. Amazing.

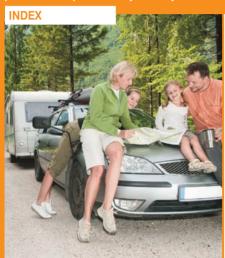
We also have some exciting mobile solar packages for Boats, RV's, 4WD's etc. With the rise of the "Grey Nomad" market there has been a demand for sophisticated but portable high power AC mains on the move. Check them out on pages 390.

We would be remiss in not mentioning our Electronic Antifouling Systems shown on P387. This new method of preventing marine growth on your boat is becoming widely popular and far cheaper over time than conventional & dangerous paint systems and it's made in Australia!



A major addition to the field of vehicle safety has been the development of rear vision camera technology. We have a very comprehensive range of these products at reasonable prices in both hard wired and wireless versions. While you are browsing that section check out the car "event" cameras/recorders. They can be used facing into or out of the vehicle! Dont just let the police take your word for it.

And finally it wouldn't be Jaycar if we didn't have an extensive range of car sound, amps and massive wiring & accessory products. Depend on Jaycar for your Auto & Outdoor products.



OUTDOORS		AUTO	
12V Camping Accessories	384	4WD & Caravan Products	390
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CREE® LED TORCHES

90 LUMEN CREE® LED TORCH

190 LUMENS CREE® LED TORCH
• CREE® P4 LED

· Splash Resistant Cat ST-3452

CREE

Weight: 33g

Cat ST-3450

Splash resistant

CREE® LED powered torches have made a name for themselves as being able to produce powerful white light without the excessive power consumption. The revolutionary design of CREE® LEDs gives torch enthusiasts great versatility. They will start in sub-zero temperatures and last for thousands of hours.

Our range are all encased in rugged aircraft-grade aluminium that will withstand the rigours of constant use. light or for quickly checking a map. Tactile switches are standard allowing for momentary on

CREE

lighting, perfect for signalling across distances in poor



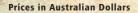
190 LUMEN CREE® LED TORCH WITH ADJUSTABLE LENS

Features an adjustable beam to allow you to focus the light on objects at varying distances or to widen the beam for more distributed light.

Cat	5	-3	45



7	Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
	90	ST-3452	\$19.95	\$17.70	\$15.70
	170	ST-3454	\$24.95	\$22.35	\$19.70
	190	ST-3450	\$24.95	\$22.35	\$19.70
	190 Adjustable Lens	ST-3456	\$34.95	\$31.45	\$27.90



105mm

7 Lumens

250 Lumen CREE® LED Torch with Adjustable Beam

High powered 250 lumen CREE® LED torch with a fully adjustable beam spread. The thick convex lens creates a sharp, perfectly circular projection. The lens is designed in such a way as to create two concentric circles where the outer circle of light is brighter than the inner. Twist the grip at the head of the torch clockwise to focus the beam on an object up to 200m away or anti-clockwise for a wide beam to light up your immediate vicinity. Extrusions down the shaft of the torch make for a solid grip. Finished in black with a tactical switch for mode adjustment.

Specification	ıs
Output	250 lumens
Requires	3 x D batteries
Burn time	3 hours
Light modes	High, medium, low, strobe, SOS
Dimensions	250(L) x 54(Dia)mm

Qty 5+

\$44 90



250 ST-3455 260 Lumen Rechargeable CREE® LED Torch

LED torches continue to make improvements in efficiency. You can now achieve very high lumen output in very small packages and this torch demonstrates that very well. It will output 260 lumens of white light from a battery that is slightly larger than a single AA. The size of this torch means it's great for around the house activities and the light power perfectly suits ventures into the wilderness. No need to worry about constant battery replacements as this torch uses a rechargeable Li-ion battery (mains charger included). The torch is silicone gasket sealed at all ends for splash resistance. Spare battery sold separatley SB-2403

Specifications	
Burn time	5 hrs
Liaht madas	High, medium,
Light modes	low, SOS, flashing
	Requires one
D-44	rechargeable 3.7V
Battery	2200mAh Li-ion
	(included)
Dimensions	205(L) x 45(Dia)mm

\$39.90



7	Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
	260	ST-3453	\$69.95	\$62.95	\$55.95

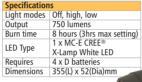
Cat.

Qty 1+

\$49 95

750 Lumen X-Glow CREE® LED Torch

A worthy new addition to the X-Glow series of CREE® LED torches. Powered by a quad-die CREE® MC-E LED that is able to punch out 750 lumens of retina-destroying brightness. This is the kind of torch you need for serious outdoor activities. Camping, boating, emergency rescue departments, police, military, defence against the living undead - you name it. The wall of light will turn night into day and then some. It's silicone gasket sealed at the lens and battery ends so unwanted water and other liquids won't seep in. Functionally extruded and bevelled at the lens end so you won't lose your grip. The torch uses a twist switch at the base to lower the chance of accidental engagement. High quality rugged aluminium construction finished in gun metal matte grey/black





7 Lume	ens C	Cat. (Qty 1+ (Qty 5+	Qty 10+
750	S	T-3451 S	79.95	\$71.95	\$63.95



910 Lumen CREE® XM-L LED Torch

An incredibly powerful torch packing the new CREE® XM-L T6 LED which boasts a 20% efficiency improvement over the XP-G LEDs at the same current. For such a compact unit the light output is immense (up to 910 lumens!) making it ideal for heavy duty applications such as marine rescue, caving, or security. Features a stainless steel belt clip for secure attachment to your belt, bag, or gear and a tactile button for quick and easy light mode changes. Supplied with batteries and mains battery charger.

Specifications	
Lumens	910
Burn time	1.5 hours (max output)
Requires	2 x 18650 Li-ion batteries
Light modes	High,med,low, flashing, SOS
Accessories	Carrying strap, belt clip
Dimensions	243(L) x 46(Dia)mm



7	Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
	910	ST-3480	\$99.00	\$88.95	\$78.95



LED TORCHES

1 Watt 14 LED Torch

Extremely bright LED torch with machined aluminium body. Robust and O-ring sealed for maximum protection.

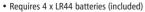
7

 Requires 3 x AAA batteries Dimensions: 119(L) x 33(Dia)mm

7	Cat.	Qty 1+	Qty 5+	Qty 10+
1W	ST-3393	\$9.95	\$8.75	\$7.75

Super Bright LED Torch with Magnetic Head and Telescopic Neck

A pen-sized torch with super bright LEDs and magnetic head for picking up objects. The torch head is attached to a telescopic mast hidden away inside the casing. Fully extended the torch has a total length of 546mm allowing your search into cracks and crevices. A gooseneck at the end allows you to shine light around corners and pick up metallic objects out of reach.



• Dimensions: 165(L)mm to 546mm (neck fully extended); 20mm torch head diameter)

www.iavcar.com.au Freecall order hotline: 1800 022 888				This colour	
	260	ST-3463	\$14.95	\$13.35	\$11.70
2	Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+

LED TORCHES (CONTINUED)

Rechargeable LED Torch with Built-in Camera and Laser Pointer

Not only is this a rugged and bright LED torch with a blinding 160 Lumen output, it also features a camera to record what is being illuminated to the supplied 4GB MicroSD card. Great for security and surveillance applications to collect photo or video evidence or around the home to record those things that go bump in the night. Also features a rechargeable Li-ion battery and a laser pointer to help frame the subject you want to record.

- Bright 2W 190 Lumens

 Laser pointer
 Up to 10 hour use from 4 hour charge
 Weatherproof IP65 rated
 Supports a MicroSD card (up to 16GB which) provides up to 8 hours of continuous recording)

	7 6
Specifications	
Video resolution	640 x 480
Frame rate	30fps
Image format	JPG
Video format	AVI
Audio	Built in Mic
Dimensions	138(L) x 24(Dia)mm
Weight	100g (with battery)

7	Lumens	Cat.	Qty 1+	Qty 2+	Qty 4+
	190	QC-8011	\$149.00	\$133.95	\$126.95

3W LED Torch with Solar Recharging Compartment

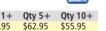
A powerful 3W Nichia LED torch that can be charged from the solar compartment. For

the compartment on the dashboard of your car to recharge its battery then slide the torch out when ready to use. The charging compartment has test and charge LED indicators.



Specifications	
	214/
Power	3W
LED	Nichia (Japanese made)
Batteries	1 x 3.2V 1200mAh Li-ion
batteries	rechargeable battery (included)
Lumens	150
Burn time	2.5 hours
Water resistant	Yes
Recharge time	11 hours
Solar panel type	Amorphous
Torch dimensions	166(L) x 34(Dia)mm
Solar compartment dimensions	198(L) x 55(H) x 95(D)mm





GREEN POWERED TORCHES

Dynamo Solar LED Torch

Just a few cranks on the handle of this torch and it will give you a super bright light. It also features a solar panel to keep the torch charged and ready for use. The built-in hi-efficiency lithium battery allows you to charge over and over again. The batteries don't need to be replaced just wind to recharge.

• Dimensions: 150(L) x 50(W) x 30(D)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	ST-3345	\$19.95	\$17.70	\$15.70

Dynamo Torch with Radio, Clock & Emergency Alarm



Featuring full clock alarm functions, AM/FM radio, a three high intensity LED torch and a four LED reading lamp that can all be powered by manual hand crank (dynamo), batteries or external power supply. Also features a siren for emergency situations, 3.5mm headphone jack, external mobile phone battery charger, battery low LED indicator, digital tuning, a large LCD with an orange LED backlight.

• Approximately 5 minutes of cranking will fully charge the internal battery.



Specifications					
Size	200(W) x 130(H) x				
Power	External AC Adapt)mA		
Battery	3 x AA batteries (ı				
Internal Rechargeable Battery	Ni-Cd 3.6V 300mAh				
Antenna	250mm telescopic antenna (FM) In-built ferrite (AA)				
Headphone Jack	3.5mm stereo				
External Mobile Phone Charger	5VDC				
7	Cat.	Qty 1+	Qty 3+	Qty 6+	
	ST-3352	\$59.95	\$53.95	\$47.90	



HIGH POWER HID TORCH

2500 Lumen 24W HID Torch

This extremely powerful HID torch outputs a blinding 2500 lumens of brightness, all built into a compact, machined aircraft grade aluminium housing with anodised black finish. The included 2200mAh Li-ion battery provides up to 40 minutes of burn time, and also features three built-in white LED's so you are never left in the dark if the battery is unable to power the HID torch. It is supplied in an aluminium case which holds the torch, rechargeable battery, mains and cigarette lighter chargers.

ST-3469

Spare Li-ion Battery to suit available

Specifications	
Output	2500 lumens
Burn time	40 minutes
Batteries	2200mAh
Dimensions	235(L) x 70(Dia)mm



					WARRANT C
7	Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
	2500	ST-3361	\$199.00	\$178.95	\$158.95
	Spare Li-ion Battery NEW	ST-3373	\$49.95	\$44.90	\$39.90



PRICE BREAKTHROUGH!

LED HEAD TORCHES

40 Lumen 12 LED Head Torch

A straight forward head torch without all the 'bells and whistles'. The unit has a total of 12 LEDs which can be switched to various intensities: 4 LEDs, 8 LEDs, 12 LEDs or strobing. It is light, compact, very efficient on batteries and comes with a fully adjustable head strap.

• Requires 3 x AAA batteries (not included)



Specifications	
Output (lumens)	40
Burn time	15-20 hrs
Light modes	Low, medium, high, flashing
Water resistant	No
Batteries	3 x AAA (not included)

Z Lumens 40

Qty 5+ Qty 10+

\$8.75

CREE(

Diving Head Torch also available - see page 387

Cat.

ST-3286

180 Lumen CREE® LED **Adjustable Head Torch**

CREE® LEDs are the last word in illumination and 3W of power will really light up your world. Three modes of operation - high, low and strobe. The beam can be focused quickly from wide to spot by simply sliding the zoom in or out. Comfortable elasticised head strap. Camping, caving, fishing etc.

Specifications	
Output	180/80 lumens
Burn time	8hrs
Light modes	High, low, strobe
Water resistant	Yes
Batteries	3 x AAA (not included)
Weight	105g with batteries



7	Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
	180/80	ST-3279	\$39.95	\$35.90	\$31.90

185 Lumen CREE® LED Head Torch

Working in the ceiling or under the car inevitably requires some light, the more the better! A head torch is often the best solution since you retain the use of your hands but keep the light focused on the point of interest. With this head torch you get a powerful CREE® LED that provides 185 Lumens of white light. White light is particularly good at helping you spot imperfections in dark places, so if you're searching for that gasket leak in an engine the warm-yellow of a halogen isn't ideal. The head torch uses a comfortable adjustable head strap and the torch can be rotated through a range of 180 degrees. Not only for handyman work it's fantastic for caving, hiking or camping.



Freecall order hotline: 1800 022 888

		\
	Specifications	
	Output (lumens)	185
	Burn time	8 hrs
	Water resistant	Yes
Batteries		2 x AA batteries
		(not included)

7	Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
	185	ST-3283	\$39.95	\$35.90	\$31.90

LED TORCH KIT

120 Lumen LED Torch Kit

Configure the light in any of three different ways: a hand-held torch, headlamp or a handy lantern. The head torch comes with its own battery pack and head band and the lantern makes the ideal tent light for

• Lanyard and	tripod included.	
Specifications		The second second
Batteries	1 x CR123A, 2 x AA (not included)	
Output	120 lumens	121
Torch	98(L)mm	
		HEADLAMP

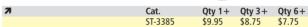
7	Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
	120	ST-3391	\$49.95	\$44.90	\$39.90

KEYRING TORCHES

Solar Powered Keyring Torch - 2 LED

A handy keyring torch that will never let you down. The twin hi-brightness LEDs are powered by internal Ni-Cd batteries that are kept topped up by the keyring's built-in solar cell. Just a few minutes exposure per day will keep the torch fully charged and ready for immediate use.

Approx 70mm long.



CREZU

Mini LED Keyring Torch

This keyring torch contain a LED to produce a bright light at a touch of a button. Great for parties & discos.

 Uses 3 x 1.5V silver oxide 392 included (replacement batteries use our SB-2502)

Dimensions: 45(D) x 10(W) x 10(H)mm

7	Cat.	Qty 1+	
White	ST-3382	\$2.95	

Super Bright LED Keyring Torch

The torches use a high brightness LED and draw very little power, but produce an amazing amount of light for their size. The 5mm super bright LED runs on CR2016 batteries that are included with the torch

· Replacement battery use our Cat. SB-2524 x 2 (Both)

Measures just 45(L) x 32(W) x 15(D)mm

	The second	
7	Cat.	Qty 1+
Blue	ST-3047	\$6.95
White	ST-3048	\$6.95

Laser Pointer Keyring

This laser keyring pointer is chrome plated, and has a key chain attached.

- . Uses 3 x LR44 batteries included.
- Wavelength 650nm
- Max output < 1mW
- Size, only 73mm long x 14.5mm dia.

This laser pointer has passed Australian Standards for laser pointers. AS/NZS 2211.1:1997.





Bike & Safety Lights

BIKE, CYCLE & SAFETY LIGHTS

Flexible LED Safety Lights - Pair

A pair of handy press-down LEDs that have two modes of operation, blinking and constant on. A great little accessory to enhance your personal safety while riding a bike at night. Each LED is encased in flexible silicone that can be wrapped around bicycle handlebars or a helmet strap

• Each unit requires 2 x CR2032

battery (included)
• Dimensions: 75(L) x 29(W) x 29(H)mm



Otv 1+

ST-3136 \$8.75 Solar Powered LED Bicycle Tail Light

This solar powered tail light is a simple and versatile addition to your night riding equipment. The solar cell charges the two AAA batteries during the day giving you enough power to ride for hours at night. The device uses 4 red LEDs that blink in unison creating an easily visible beacon to cars & trucks so you don't become road pizza.

Weight: 73g (with batteries)Dimensions: 64(W) x 65(H)mm



Otv 3+

Otv 6+

1	Cat.	Qty
	ST-3276	\$9.9

Bright Bicycle Rear Safety Light

- 5 super bright LEDsUp to 150 hour run time
- 6 light modes
- Mount using multi-purpose bracket or belt clip
- Quick release bracket
- 2 x AAA batteries required Dimensions: 68(L) x



160 Lumen Cap Mount **CREE® LED Torch**

This neat compact 3W CREE® head torch with zoom feature is ideal for fishing, camping, changing the oil or even for the explorers walking through dark caves. This super bright head torch clips onto your hat or cap, which frees up your hands to take on task whilst providing you with maximum light. Use the high intensity adjustable light beam to direct the light and focus with either a spot light or flood beam.

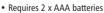
- Burn time: 4 hours
- Bulb type: CREE 3W
 Output: 160 lumen
- Water resistant: No
- Batteries: 3 x AAA (not included)



7	Cat.	Qty 1+	Qty 5+	Qty 10+
	ST-3291	\$12.95	\$11.35	\$10.35

Emergency Caution Light

Compact and visible up to a 800 metres away, this super strength plastic caution light contains a strong magnet for placement on vehicles in an emergency situation. With built in IC controlled LED flash, this light has 9 user-selectable flash patterns: rotate, double blink, single blink, alternative, SOS for rescue, solid-on high and low, and 2 and 4 LED flashlight. Perfect for cars, boats and watercraft



• Dimensions: 105(Dia) x 35(H)mm



Breakdown/Emergency Road Flasher

Every car on the road should have a couple of these. Simply place them on the ground to warn other motorists and guide them around a problem. The lights have three high-intensity LEDs that can be easily seen from a distance.

They are made from tough plastic and will easily withstand the weight of a vehicle driving over them. Two lighting modes - steady and flashing.

- Requires 2 x AAA batteries (use SB-1739)
- Dimensions: 90(Dia) x 25(H)mm

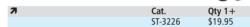
LRHZU, ST-3185 \$4.95

LED Indicator Strap for Cyclists

The road can be an unfriendly place for cyclists at times. In some countries the humble bicycle is by far the most used form of urban transport but here cars rule the roads. Communicating intent to turn while riding a bicycle is not always clear to motorists so this LED indicator is perfect. It comes in two parts, the LED indicator light

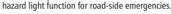
which you strap around your waist or the bike, and the wireless controller that would commonly be fitted to your handlebars. Left and right buttons on the controller activate the corresponding indicator plus there's a hazard mode if you need to patch up a tyre.

- 28 bright LEDsRequires 3 x AAA batteries
- Dimensions (LED lights): 257(L) x 119(W)mm
- Dimensions (Controller): 56(L) x 45(W) x 19(D)mm



Waterproof Bicycle LED Indicator Kit

Keep your eyes on the road and turn safely using our bicycle indicator kit. The control unit mounts on to your handlebar and is within easy reach while the indicator mounts on the base of the seat for clearer visibility. Audible beeps confirm your choice of direction; one beep for a right turn and two beeps for a left turn. It even has a



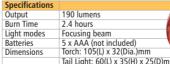
- Super BrightLeft & right indicatorsAudible beeps Waterproof • Hazard light
- Wireless; easy installation no messy cables Handlebar mounts with quick release
- Signal pod requires 3 x AAA batteries
- Dimensions:
- LED indicator panel (without bracket)
- approx 160(L) x 24(W) x 64(H) mm Indicator buttons (without bracket): approx 57(L) x 21(W) x 44(H) mms





LED Bike Light Kit

Be sure to be seen on the road! This LED bike torch outputs 190 lumens and has an adjustable focus beam. Mount the torch onto 25 to 31mm handlebars with the adjustable bracket or detached it is a conventional torch. The kit also includes an ultra-bright rear safety light with 3 modes of operation. Designed to clip onto your belt, bicycle saddlebag or back pack



Tail Light: 60(L) x 35(H) x 25(D)mm

Otv 10+ ST-3465 \$29.95 \$26.90 \$23.70

6 Piece Stainless Steel **Foldout Bicycle Tool Set**

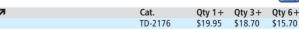
A compact stainless steel bike tool set measuring in at a handy 70mm. It contains all the drivers you need for quick repairs and adjustments making it an essential tool for any cyclist.

- 3 4 5 6mm hex
- 5mm flat screwdriver Philips screwdriver
- Dimensions: 70(L) x 25(W)mm











WORK LIGHTS

Multifunction LED Lamp and Torch

Adjust light with the flexible goose neck & clamp onto table tops up to 25mm thick. A versatile light source great for reading in the bedroom, shed or on your next BBQ. It also doubles as a detachable hand torch

- 3 x ultra bright white LED
- Requires 3 x AA batteries
 Torch dimensions: 165(L) x 40(W)mm
- Stand dimensions: 190(H) x 120(W)mm



ST-3462 \$17.70

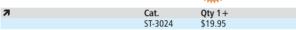
LED Work Light with Torch - Rechargeable

A robust LED work light and torch that gives the brightness needed for emergencies boating, camping or in the garage. It has a strong magnetic mount, a hanging hook for hands-free operation, and two lighting options: 30 LED work light, or a single LED torch. Mains plugpack

and car charger included

- Charge time: 14 18 hours
- 8 hours burn time per charge
 Anti-slip rubberised finish





Rechargeable 51 LED Work **Light with 2W Torch**

This handy rechargeable work light features 51 high brightness LED's and a 2W high power LED torch which is enough for any sticky situation. Ideal for camping, boating, working on the car or emergencies. Supplied with a magnetic mount and a hanging hook for hands free operation. Mains plug pack

and 12V car charger included.

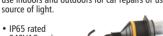
- Charge time: 5-6 hours
- Running time: up to 5 hours3.6V, 1800mAh
- rechargeable battery
 Dimensions: 460(L) x 60(Dia)mm





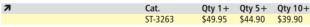
4 X 3W High Power 240V Work Light

This IP65 rated shockproof LED work light is housed in a heavy duty rubber design to absorb impact and even abuse from automotive workshops. Featuring four powerful 3W LEDs producing 600 lumens and a swivel hook for hanging that can rotate a full 360 degrees. Suitable for use indoors and outdoors for car repairs or use in garages as a reliable source of light.



• 240VAC mains powered included Cable length: 5m

• Dimensions: 450(L) x 62(Dia.)mm



FANTASTIC WEB SITE

In the 60's IBM produced a video which attempted to show the lay person the enormous dynamic range of SCALE of the very very big to the very, very small.

If you saw that video now you would realise that it is very dated.

Good news! There is a new graphic animation on a web site which shows down to an (alleged) "string" (the smallest particle postulated) up to the very large structures in the universe and everything in between in scale.

This is a truly remarkable explanation of the scale of the world in which we are a tiny part. It is indeed so remarkable it may trigger a bright young person to be inspired to take up science as a career.

Freecall order hotline: 1800 022 888

Please have a look. http://htwins.net/scale2/

180 Lumen Rechargeable Work Light with Magnet & Hanging Hooks

A functional work light no motor enthusiast should be without. Affix it to any metallic surface via its magnetic base and back, then adjust the direction of the light using the multi-position stand. Hold it in your hand like a torch to illuminate and inspect, in and around your vehicle. Unfold the two built-in hooks to hang the light off you car bonnet and provide yourself a steady light as you work on your car engine.

- Rechargeable Lithium battery
- Charging time: 4 5 hours
 Continuous operation time: over 4.5 hours after a full charge
 - 3 x 1W LEDs with optical lens for better focus Multi-position stand
- Magnetic base and back
- Two hanging hooks

- Difficitations. 200(L) X 02(VV) X 44(D)				
7	Cat.	Qty 1+	Qty 5+	Qty 10-
	ST-3261	\$59.95	\$53.95	\$47.90

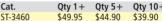
CREE

150 Lumen Torch with Gooseneck & Magnetic Base

A tough & handy LED work light suitable for use at home, in the car, garage and even the office.
Position the light exactly where you need it with flexible tube & powerful magnetic base, the high powered 3W LED will emit a very bright focused beam. Aluminium build, designed to last.

Specifications	
Output	150 lumens
Burn time	15 hours
Water resistant	Yes
Batteries	3 x AA (not included)
Dimensions	35(D) x 180(L)mm





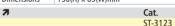
LANTERNS

80 Lumen 4 Mode LED Lantern

Innovative outdoor lantern with ultra bright LED. Great for any outdoor adventure or camping trip. Weatherproof design with 4 modes, featuring 3 different light intensities & a flashing mode. Stands on flat surface or use the attached metal hook to hang the lantern anywhere.

- 4 modes: Maximum, medium, Low & blinking
- 6 x ultra bright white LFDs

o n anna bing	iii iiiiiii EEDS
Specifications	
Output	80 lumens
Burn time	20 hours (steady) 40 hours (flashing)
Requires	3 x AA batteries
Dimensions	150(H) x 85(W)mm







3W LED Torch/Lantern Combo

If you're heading into the wilderness, a torch that can be configured as a lantern is an incredibly useful tool. The lens end of this torch has a knob that when rotated swivels the LED between directional and lantern modes. The convex LED is designed for maximum light spread so you don't always need to sit in the beam to see what you're doing. Features a rubber edged base to absorb the occasional knock and a rotatable hook to hang from the top of your tent, a branch or around the campsite.









7	Cat.	Qty 1+	Qty 3+	Qty 6+
	ST-3135	\$24.95	\$22.35	\$19.70

0.5W Rechargeable LED Lantern

Super bright LED lantern with brightness control is Ideal for home use, outdoor sports and camping etc. Being weatherproof it is suited for emergency situations or during periods of extreme climate conditions where lighting is essential. Supplied with cigarette lighter socket, mini USB cable and 3xAAA rechargeable batteries.

- 360° rotating mode switch
- 6 x LED Lantern
- Lantern mode to 100 or 50%
- Safety strobe light0.5W LED Torch
- Weatherproof Dimensions: 62(I) x 140(H) x 31(D)mm









HALOGEN SPOTLIGHTS

3,000,000 Candlepower Rechargeable Halogen Spotlight

Provides 20 minutes continuous operation with 3,000,000 candlepower will be plenty of light for any outdoor activity. Ideal for rescue, shooting, fishing or boating. Rechargeable via mains or car cigarette lighter socket. It also has an LED map light. Rubber armoured lens guard and ABS construction.

- 55 watt halogen Built-in SLA battery
- Locking on/off switch
- LED map lightAC and DC chargers
- Replacement globe Cat SL-3221

Specifications	
Light power	3,000,000 Candlepower
Globe	55W Halogen
Features	Rechargeable
Dimensions:	210(L) x 150(Dia)mm

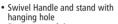


7	Candlepower	Watts	Cat.	Qty 1+	Qty 5+	Qty 10+
	3,000,000	55	ST-3301	\$19.95	\$17.70	\$15.70
7			Cat.	Qty 1+	Qty 10+	Qty 25+
	Replacement Globe		SL-3221	\$5.95	\$5.25	\$4.75

5.000.000 Candlepower Rechargeable Halogen Spotlight with Swivel Handle

This powerful and compact hand-held spotlight provides 20 minutes continuous operation. It has an integrated multi-position rubber grip for

a more comfortable grip and also has a dual LED complementary light. Comes with mains power adaptor and cigarette lighter charger. Replacement globe - SL-3222



Bumper guard ringHigh polished reflector6 volt H3 55W Halogen bulb



3pecineations	
Light power	5,000,000 Candlepower
Globe	6V H3 55W Halogen
Features	Swivel handle
Dimensions	260(L) x 175(W) x 180(H)mm

7	Candlepower	Watts	Cat.	Qty 1+	Qty 5+	Qty 10+
Torch	5,000,000	55	ST-3303	\$29.95	\$26.90	\$23.70
7			Cat.	Qty 1+	Qty 10+	Qty 25+
Replace	ment Globe		SL-3221	\$5.95	\$5.25	\$4.75

LED SPOTLIGHTS

CREE® LED Rechargeable Spotlight - 247 Lumens

Super bright LED spotlight with 247 lumen output switchable between half and full power output. AC and 12VDC car charger are both included so it's ideal for boating, camping and other less politically correct outdoor activities. LEDs indicate battery status and it also has an emergency SOS mode as well as a handy flip-up work stand for changing tyres etc. Robust ABS construction.

- CRFF® LFD
- 247 lumen output
- · Colour shaded emergency light
- Work stand
- Battery level indicator
 AC/DC recharge Weatherproof
- Multi brightness modes
- Burn time of 8 hours

Specifications	
Light power	247 Lumen
Globe	CREE® LED
Features	Rechargeable
Dimensions:	230(L) x 140(W) x 160(H)mm





7	Cat.	Qty 1+	Qty 5+	Qty 10+
247 Lumens	ST-3309	\$39.95		

LED SPOTLIGHTS

Solar Rechargeable LED Spotlight - 140 Lumens

This super bright 140 lumen solar rechargeable LED spotlight is perfect for your car, boat, workshop, camping or fishing trip. It has a dual position swivel handle for maximum versatility and a high tech solar panel which allows you to charge the battery when not near a 240V mains. Solar cell, car cigarette lighter and mains chargers are all included ensuring you have your spotlight charged at all times and being LED will provide countless of hours of operation without the need for replacement globes.

Weatherproof

Light power

Features

Detachable weatherproof solar

station
• 12V DC car cigarette lighter charger



7	Cat.	Qty 1+	Qty 5+	Qty 10+
140 Lumens	ST-3312	\$39.95	\$35.90	\$31.90

Replacement SLA batteries for spotlight torches available in 6V/12V see page 330

HID SPOTLIGHT

High Intensity Discharge (HID) Spotlight - 35W

This full-feature unit includes inbuilt rechargeable SLA battery, 240V AND 12V charger and swing away stand. It also includes a dual-LED map light

- 35W HID bulb
- 30 million candlepower Amazing beam distance
- Reflector dia. massive 135mm Spare 12V 2.8Ah battery available
- Dimensions: 280(L) x 190(D) x 140(W)mm (less reflector)



7		Cat.	Qty 1+	Qty 5+	Qty 10+
	35W HID	ST-3379	\$69.00	\$61.95	\$54.95
	Spare Battery 12V 2.8Ah	ST-3397	\$24.95	\$22.35	\$19.70

OUTDOOR GADGET

Digital Map Measure with LED Light

Working out the distance between two points on a map or chart is easy with this navigation tool. The scale can be adjusted for any map and the device can calculate the time required to travel the distance at a given speed. The LCD screen has a backlight for night use and an LED flash light. A must have gadget when out on the road, water, or in the bush.



- 10m measuring range Minimal distance on display: 1mm
- Backlight LCD
- LED FlashlightON/OFF, light, unit, scale and trace buttons
- 1 x CR2032 3V battery Included
 Dimensions: 96(L) x 50(H) x 13(W)mm

7	Cat.	Cat. Qty 1+		Qty 6+		
	XC-0374	\$9.95	\$8.75	\$7.75		

GARDEN SHED & CARAVAN ACCESSORIES

Outdoor UHF/VHF/Marine TV Antenna

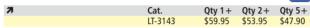
Digital ready. It rotates. Ideal for "grey nomads". This unit is ideal for the traveller. Because you could be in any part of Aust/NZ this antenna works on all frequencies. (Some better than others, we admit). It covers VHF low, down to 45MHz (channel 2) to 860MHz (channel 69).

It includes a signal amplifier (240VAC adaptor supplied) AND a rotator motor built into the antenna housing AND a remote control for that. It also comes with approx. 8 metres of TV lead with a weatherproof plug on one end.



- Supplied with other hardware. Output 80 dbuV
- Requires 2x AAA batteries

Antenna dimensions: 750(W) (deployed) x 30(L) x 100(D) (mm) (Folds down for storage)

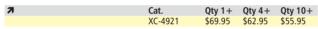


SET TOP BOX FOR CARS

12VDC HD Digital Set Top Box

Great for use on the road, this high definition set top box will pickup all the digital channels on offer in your locale. You can also plug in a USB drive and record TV in MPEG2 format to watch at a later date

- Output: HDMI, Composite, RF
- USB port for recording and playback
 Cigarette lighter cable included
- Suitable antenna LT-3143
- (available separately)
 Dimensions:154(W) x 117(D) x 40(H)mm



SOLAR POWERED VENTILATORS

Solar Powered Ventilator

Completely solar powered to reduce mould, mildew, moisture and excess heat build-up in boats, caravans and RVs, or anywhere else you need air extraction. Air is drawn from inside and expelled through the vent.



· Stainless shroud

BUTO A OLTOOR

- Gasket included
- Dimensions: 215(Dia) x 30(H)mm

7	Cat.	Qty 1+	Qty 2+	Qty 4+
	MP-4559	\$79.95	\$71.95	\$63.95

Solar Powered Ventilator

Rooms prone to odious smells, noxious gasses, high build up of mould etc should always be fitted with some kind of vent extraction to expel the unwanted air. This solar powered vent extractor will do it all without an ongoing operating cost. It is a completely self contained unit capable of operating for up to 24 hours on a fully charged battery. The solar panel sits adjacent to the extraction vent grille to prevent fouling of the solar cells. Perfect for a variety of applications such as bathrooms or kitchens.

- Good for roof or wall mounting
- 60 cubic metres per hour fan capacity
 3.5V solar panel, rated at 400mA max
- Includes spare blade6.0VDC 1300RPM motor requiring at least
- Built-in rechargeable 1.2V 3000mAh Ni-MH battery
- · Operates without wires and without any
- running cost
 For use in homes, kitchens, bathrooms, offices, temporary sites and accommodations, etc
 • Fully charged battery will operate for
- approximately 24 hours
 Dimensions: 210 x 240mm

7	Cat.	Qty 1+	Qty 2+	Qty 4+
	MP-4558	\$99.95	\$89.95	\$79.95

CARAVAN ALARM & LIGHTING

Shed / Caravan Alarm

Simple and effective garage or shed alarm. Consisting of a keypad and single reed switch for a door or window and 5m of cable for easy DIY installation. It can be used as an instant alarm, with an entry delay or as a door chime to announce entry. Powered by a single 9V battery. (not included)

Dimensions: 162(H) x 85(W) x 32(D)mm





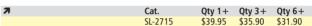
\$19 95 \$17.70 \$15.70

Solar Lighting Kit - Low Power (LED)

Ideal for garages, gazebos and greenhouses. The solar panel is equipped with a swivel base that will allow for custom positioning for maximum light absorption. It is weatherproof able to withstand the harshest conditions. A total breeze to install.

Pack includes solar panel and mounting bracket, 2.4m cable and rechargeable enclosed Ni-Cd battery.

- Rechargeable battery: 3.6V 600mAh Ni-Cd
- Solar panel dimensions: 175(W) x 127(H) x 15(D)mm
- Lamp dimensions: 180(W) x 62(H) x 50(D)mm

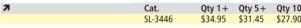


19 LED Caravan & Automotive Roof Light

An easy way to provide more illumination in your vehicle. It's a 12VDC

powered circular roof light that makes use of 19 x white high brightness LEDs. Installation is simple, just wire it up to a power source and mount it to the roof. Features an on/off switch.

- Dimensions: 147(Dia) x 36(H)mm
- Power: 12VDC
- LEDs: 19



24 LED Caravan Roof Light

Replace your unreliable caravan or mobile home incandescent globes with this low power 24 LED roof light. It can be easily mounted to a roof with 4 screws (not supplied) to provide your interior with all the light it needs.

The unit has a rear metal housing with detachable front cover.



Cat. Qty 5+ Qty 10+ SL-3447 \$44.95 \$40.45 \$35.90

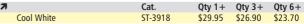
Linkable Aluminium LED Strip Lighting

A stylish aluminium LED strip light. Suitable for caravan, marine, 4WD, auto and domestic applications. Connect multiple lights together with the included connector to match your desired length. Screw mounting holes provided on the ends for easy installation.



- Works on 12V and 24V systems
- 3528 SMD LEDs (42 pieces)



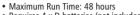


Camping Accessories

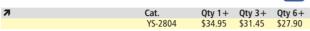
12V CAR & CAMPING ACCESSORIES

Portable Ceiling Fan and Light

Designed for use while camping, this battery powered ceiling fan is also great for use around the home or workshop. With a carabineer for easy setup you simply hang it anywhere you require some airflow and turn it on. The fan has soft foam blades for safety and two speed settings to match your cooling requirements. The bright white LEDs allow you to illuminate your tent or work area, while a softer yellow LED mode allows it to be used as a night light.



Requires 4 x D batteries (not included) • Dimensions: 220(Dia) x 145(H)mm



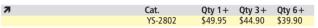
Portable Camping Shower - Battery Operated This high quality portable shower is battery

powered so you can use it almost anywhere Simply drop the submersible pump into a clean water supply or attach it to a compatible water barrel, hang the shower head in a convenient location, and activate the pump with the push button switch. It can also be used as a direct water pump by detaching the shower head. Made from impact resistant ABS plastic with rubber seals all components are weather resistant.



Power Cable Length: 1.8m
Requires 4 x D batteries (not included)

• Battery Pack Dimensions: 100(Dia) x 95(H)mm



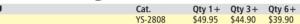
12V Portable Stove

Ideal for cooking and/or keeping food hot on those long trips. It gets up to 140°C and its insulated design keeps food hot, while the outside stays cool. It plugs into the cigarette lighter socket in the car.

Outside dimension is 260(L) x 180(W) x 190(H)mm







12V Camping Shower

All you need is a bucket of warm water and your vehicle's 12V battery and you can wash away the cares of the day. The 4.8 metre power cable plugs into your vehicle's cigarette lighter socket and a waterproof switch controls power to the pump. The shower comes with 2.1 metres of plastic tubing, pump, showerhead, hanging hook and a nifty carry bag to store it in. This self-contained little beauty even has a water flow control valve built into the showerhead and will become an indispensable part of your travelling kit. This product is ideal for resellers of camping equipment, 4WD accessories and ship chandleries etc.



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	YS-2800	\$24.95	\$22.35	\$19.70

12V Car Kettle

Now you can stop, revive, survive anywhere. This kettle makes the ideal travelling companion for those who spend a lot of their time on the road. Simply plug into your car's cigarette lighter socket, mount to your car's interior and boil away. Holds up to 550ml and makes up to 4 cups of tea, coffee, soup or any other hot beverage. Note that this device is not the same as your domestic kettle which consumes much more power so boiling times will be longer

• 2 cups, strainer and mounting bracket included

• Dimensions: 235(H) x 95(dia)mm

71	Cat.	Qty 1+	Qty 3+	Qty 6+
	GH-1380	\$17.95	\$15.95	\$14.35

Rechargeable Air Pump

From party balloons and pool toys to larger air mattresses and rubber dinghies - this high-volume low-pressure rechargeable air pump will have the job done in no time. Recharged via mains power or car charger, its portable cord-free operation makes this a must-have accessory for your beach and camping inflatables.

Inflation and deflation port

Includes hose and two air nozzle fittings Mains adaptor (240VAC)

included Dimensions: 205(L) x 105(W) x 130(H)mm





12V Stainless Steel Travel Mug with Built-in Heater

Keeps your coffee, tea, or other beverages hot while driving. This handy travel mug has a built-in, thermostatically controlled heater and will maintain one of four selectable preset temperatures (room temp, luke warm, hot and very hot). The mug shows the actual temperature on the backlit LCD and indicates the heating progress via the control panel display. The mug holds up to 500ml and has an anti-spill lid with retractable drinking spout.

- Stainless steel construction with ergonomic handle
- Heats from 10 to 70°C Celsius and Fahrenheit selectable
- 1.5m detachable 12V power lead with cigarette lighter plug

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	GH-1301	\$29.95	\$26.90	\$23.70

DID YOU KNOW...

Ferdinand Verbiest (1623 - 1688)

Ferdinand Verbiest invented the first car in the year 1672. It was the first ever car invented and was powered by steam. Verbiest was an experimentalist and a missionary to China. He built his car in China as a toy for the Chinese emperor. Hence, you could rightly say, the first ever car was made in China.

Cigarette Lighter Twin Socket

Allows you to run two 12V appliances from the one socket.

· LED indicator.

71	Cat.	Qty 1+	Qty 3+	Qty 6+
	PP-2005	\$9.95	\$8.75	\$7.75

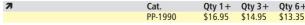
RELATED PRODUCTS

Full range of cigarette lighter plugs & sockets see page 427

3 Metre Retractable Cigarette **Lighter Extension Cord**

Rugged housing helps keeps the cord free from damage.

- · Ideal for four wheel drive use.
- Dimensions:139(W) x 149(H) x 45(D)mm







PEST CONTROL

The Amazing Flygun

The Amazing Flygun is a spring powered gun that kills flies, mosquitos and cockroaches! It is fun, safe and easy to use. The swatter is simply pushed onto the gun and it is ready to use. A long string is also attached so the swatter won't get lost. It is then ready to be reloaded and fired again. It is fun, effective and really does work! It has proven extremely popular, with thousands being sold every month!

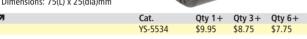


Qty 6+ Cat. Otv 3+

Personal Sonic Insect Repeller

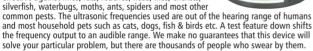
Keep the mozzies away! With a range of 6 metres, it's perfect for camping, picnics fishing etc. It also has a pocket or belt clip to keep it handy.

- Requires AA battery: SB-2424.
- Dimensions: 75(L) x 25(dia)mm

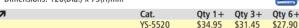


High Power 'Frequency Shifting' Ultrasonic Pest Repeller

This ultrasonic pest repeller uses frequency shifting techniques which may prevent pests from developing an immunity. The device has an output of 140dB that can protect up to 280 square metres. The repeller may be effective against mice, rats, roaches, fleas, flies, crickets,



- Supplied with mains plugpack and installation guide
 Dimensions: 120(Dia.) x 75(H)mm



Dual Speaker Pest Repeller

This pest repeller may be effective in controlling mice, rats, roaches, fleas, flies, crickets, silverfish, moths, ants and most other common pests. It uses ultrasonic sound waves to repel insects and rodents by attacking their auditory and nervous systems, causing them to relocate elsewhere. It will not affect humans and pets or interfere with televisions, radios, alarms or other electronic equipment.

A small red LED indicates the unit is operating properly as it effectively protects an area up to around 300 square metres. No more dangerous chemicals to buy, no more messy traps to clean and set, this is the year round protection your premises needs to keep those nasties away. Plug pack included.



Specifications	
Power Consumption	2W
Frequency range	24 - 50kHz
Output sound pressure	160dB

\$53.95



GARDEN ACCESSORIES

Solar Powered Butterfly

A colourful full-sized butterfly hovering in your window box or garden when the sun comes out When it doesn't a 1.5VxAA battery (not included) takes over. Includes solar cell, mounting spike and butterfly

- · Assorted colours
- · AA battery not included

Dimensions: 450(H)mm				
7	Cat.	Qty 1+	Qty 3+	Qty 6+
	GH-1834	\$19.95	\$17.70	\$15.70

FANS

Deluxe Water Misting Fan

Be cool and comfortable while outdoors with this personal water mister and fan in one. It is handy and portable with a moulded hand grip and trigger pump for ease of use. Powerful enough to provide a significant amount of breeze but safe enough for the kids to use with soft blades. Great for use while camping, at the beach, or at sporting events etc.

- Use as a water misting fan, stand alone fan or stand alone mister
- Requires 2 x AA hatteries
- Large capacity water storage section, takes ice too
- Dimensions: 270(H) x 70(Dia.)mm





\$7.95

BOATING & WATER ACTIVITIES

Hand-held Anemometer with Tripod Stand

Cat.

GH-1071

Measure wind speed in km/h, mph, ft/min, meters/sec or knots for your outdoor activity. It also indicates wind-chill, air temperature, comfort level and displays current, maximum and average wind speed. There is also a beaufort scale bar graph for a quick indication on the wind condition. Supplied with lanyard and tripod.

- LED backlit display
- Celsius and Fahrenheit selectable
 3V button cell battery (CR2032) included
- Low battery detection and display

Specifications	
Windspeed range	0.3m/s to 30m/s
Temperature range	-29.9 to +59 degrees C
Temperature resolution	0.1 degree C
Comfort levels	Comfort, Cool, Cold, Extreme, and Danger
Battery life	Approx 12 months
Dimensions	140(H) x 50(W) x 18(D)mm less stand

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1644	\$69.95	\$62.95	\$55.95

Survivor Distress Strobe LED Light

A handy safety device that is a must when you are venturing out in open water. Unit is small, lightweight with a lanyard and clip for easy attachment to any life jacket or clothing. The bright LED distress light activates automatically when submerged in water.

- · Water activated
- Lanyard and clip for attaching to life vest
- · Waterproof and floats on water

Specifications	
Battery Life	up to 100 hours
Batteries	3 x LR44 included
Lanyard	170mm long
Dimensions	54(L) x 27(Dia)mm

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	ST-3230	\$6.95	\$6.25	\$5.50

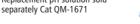
Hand Held pH Meter

A simple and accurate device for checking pH levels in water. The unit is equally valuable for keeping your fish tank at the proper pH level for optimum fish health or checking your swimming pool for the right balance. The meter is simple to use and the large liquid crystal display gives clear and precise readings that are much more accurate than messy chemicals. The unit has an extendable probe that can be adjusted to suit each application. The meter is supplied with a 9 volt battery, a bottle of pH 7.0 buffer solution and calibration tool.

- Size 40(W) x 158(H) x 34(D)mm
- 1 14pH range / 0.1pH resolution +/- 0.2 pH accuracy
- 0° $50^{\circ} \dot{C}$ operating temperature • 120g weight

1

· Replacement pH solution sold

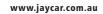






B

	WARRANTU			
7	Cat.	Qty 1+	Qty 3+	Qty 6+
pH Meter	QM-1670	\$59.95	\$53.95	\$47.90
nH Colution	OM 1671	¢0 05	¢7.05	¢6.05



Electronic Antifouling & Diving Torches

Electronic Antifouling Unit for Boats

This product is based on the collaborative design between us and "Silicon Chip" magazine. (See the September 2010 issue of this magazine for a complete preamble and technical description of electronic/ultrasonic antifouling technology.)

The product was originally only available in DIY kit form which limited availability to experienced home constructors. Even so the kit has been very popular. The scope of the original design has been expanded to include larger vessels. We also have completely manufactured the transducers & all electronics. It is now just a straight forward installation of a built and warranted product.

There seems to be a growing consensus that ultrasonic antifouling systems appear to work very well. With such a system you should be able to avoid the yearly task of slipping the boat and repainting the hull with what has to be a pretty nasty chemical goo called antifouling paint. We estimate that ultrasonic antifouling should reduce this task up to 90%. You will still probably need to slip your boat occasionally to monitor corrosion, replace sacrificial anodes, etc.

The two and four channel units are almost identical. You get a control box which contains the electronics. You get a wiring loom which includes plenty of cable to locate the transducers. You will also get a comprehensive installation & instruction manual. You will need to do your own wiring for the \pm 12VDC power source. This means you will need to provide a switch, live fuse & 10A rated marine grade wire.

Two models available:

PROUDLY









Qty 3+ \$809.00 \$719.00 \$1,079.00 \$959.00

TECHNICAL DESCRIPTION

four for a boat up to say 22m.



30m Underwater Luxeon LED Powered Diving Torch

Much has changed since our slithery primordial ancestors emerged from the ocean. We are no longer built for efficient ocean habitation so we must construct tools to enable a successful re-entry into its vastness. Bringing a torch on your diving expedition is a necessity and this one has the features you need. It's encased in a tough, chemical resistant and corrosion proof fluorescent composite yellow body and will blast out a pounding 250 lumens of white light. The torch features an on-off twist switch to prevent accidental engagement in

tight corners and a carrying strap so you don't drop it into an oceanic chasm.

- Deep special rippled handle for maximum grip and comfort
 1 x Luxeon Rebel 100 White LED
- Waterproof

Specifications	
Light output	35 hrs (max output)
Batteries	2 x C required
Sizo	187(I) v 89(M/)mm

Cat. Otv 5+ Otv 10+ 250 Lumens \$29.95 \$26.90 \$23.70

30m Fluorescent Yellow Diving Torch

Equip yourself with the right gear when venturing into the depths. This head torch can be used up to 30m underwater and adjusted to suit any cranial configuration. The fluorescent yellow is unmistakable in low-light caverns and shipwrecks. The torch is fitted to a flexible pivot mechanism so it can be rotated around a vertical range of 180 degrees, perfect for pointing the light at the right spot.

A magnetic twist-switch is used which will reduce the frequency of bumping on or off different light modes as you traverse the ocean. One twist to switch it on, another to enable the SOS signal.

Specifications	
Burn time	25 hrs (ON), 60hrs (SOS)
Bulb type	1 x Luxeon Rebel 100 White LED
Light Output	200 Lumens
Batteries	Requires 4 x AAA (included)
Dimensions	110(L) x 80(W) x 90(D)mm

Otv 10+ Cat. 200 Lumens ST-3458

The central component is a main PCB which consists of a specially programmed micro processor which generates the special frequencies which seriously deter growth of the various organisms that choose to use your boat as a home. The microprocessor and

associated circuit has a special low battery detect feature. If the battery powering this unit falls below a threshold voltage the unit turns itself off. This prevents the battery becoming totally flat. Flat batteries quickly sulphate up and are generally a write-off

after that. It is therefore important to have a regular battery charge on your boat. (The best of course is permanent connection to shore power or solar or wind turbine alternator boost.) The central circuit drives up to four ultrasonic transducers which are

firmly attached to the hull. Generally two transducers will do for a boat up 12m and

Full installation & user manual available on website

Diving Mask with Digital Camera 2GB

Going snorkelling in the Great Barrier Reef or just your local beach or river? You'd forever live in regret if you didn't take a few snapshots. This can be difficult multi-tasking between swimming and not dropping the camera into the dark depths of the ocean. Strap on this diving mask with a built-in digital camera and you can swim freely, take up to 2300 digital photos or 2 hours of video. You can also take the camera off the mask and use separately Tempered glass lens and a PVC frame make the mask highly durable. It also has an adjustable strap and a silicone gasket so it fits comfortably on your face

QC-3186

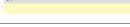
- Rated for 15m depthVideo or still photos
- 5MP sensor · LED flash
- Pop-up Viewfinder
- USB 2.0 high speed interfaceDigital/Icon LCD screen

Specifications	
Power	3.7V Li-ion battery
Resolution	2592 x 1945
Image format	JPEG
Video format	AVI
Memory	2GB
Battery life	3 hours
Cat	0+
Cat.	Ų









Power Management Systems

COMBI SERIES INTERACTIVE INVERTER-CHARGERS

Packed inside each Combi Series Interactive inverter-charger are three main components: a powerful low-frequency pure sine wave inverter, a high power 4-stage battery charger, and a fast action automatic AC transfer switch. By including all the core functionality within one unit, the Combi Series are able to provide fully automatic operation and management of your entire power system. Be it a carayan, motorhome. marine vessel, off grid home, or backup power system - the Combi Series Interactive inverter-chargers have all the features you need, plus many more.

See our dedicated power systems website www.jaycar.com.au/powertech for downloadable product information brochures and specifications, or email our team of power experts for more information at powertech@jaycar.com.au



FEATURES

- Powerful sine wave inverter, battery charger & automatic AC transfer switch in 1 unit
 Compact design with big power handling
 Power output guaranteed up to 70°C, perfect for harsh outback conditions

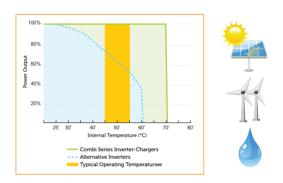
- Intelligent, automatic power management
 Automatically switches between inverter power, generator power and park power (or other AC input)
 Automatically charges the batteries when an AC generator (or other AC power source)
- is connected
- s connected
 Can automatically start the generator when required
 Boost the AC input power with inverter power for more output power!
 Stack multiple units for more power
 2-phase and 3-phase capable

- Options for full control & monitoring of solar, AC generator, DC charging, DC loads, etc
- Expanding options allow for cost effective and simple upgrades
 Designed in Australia to suit harsh Australian conditions



Freecall order hotline: 1800 022 888







Feature	CombiPlus	SuperCombi
Intelligent grid & generator power management	*	*
ATS uninterrupted AC transfer switch	*	*
Power output rated to 70°C	*	*
2-phase and 3-phase capability	*	*
Stackable for more power	*	*
Power Support feature	*	*
Dynamic Power Shifting	*	*
4-Stage adaptive charging system	*	*
Solar Charging control (accessories required)	*	*
Full remote system control (accessories required)	*	*
Auto generator start function	*	*
Aux. battery charge output	*	*
Programmable Aux. relay outputs (x3)	*	*
Interactive Pure Sinewave Inverter-Charger	*	*
DC Load control (accessories required)		*
AC Charger Timer and Generator Timer control		*
DC Charging Control (accessoires required)		*

7		Cat.	Qty 1+	Qty 3+
CombiPlus	12V 1500W	MI-5270	\$2,399.00	\$2,279.00
CombiPlus	24V 3000W	MI-5273	\$3,499.00	\$3,325.00
SuperCombi	12V 1500W	MI-5250	\$2,699.00	\$2,565.00
SuperCombi	24V 1500W	MI-5251	\$2,699.00	\$2,565.00
SuperCombi	12V 3000W	MI-5252	\$3,999.00	\$3,799.00
SuperCombi	24V 3000W	MI-5253	\$3,999.00	\$3,799.00

Power Management Systems

COMBIPLUS SPECIFICATIONS				SUPERCOMBI SP	ECIFICATIONS	
CombiPlus Specifications	MI-5270	MI-5273	MI-5250	MI-5251	MI-5252	MI-5253
Туре	12V 1500W	24V 3000W	12V 1500W	24V 1500W	12V 3000W	24V 3000W
General						
Power sharing	10A	20A	10A	10A	20A	20A
Auto transfer	16A	32A	16A	16A	32A	32A
Power stacking & 2 / 3 phase option	Yes	Yes	Yes	Yes	Yes	Yes
Weight	21kg	27kg	21kg	21kg	27kg	27kg
Dimensions L x W x H	370 x 258 x 362	370 x 258 x 424	362 x 258 x 370	362 x 258 x 370	424 x 258 x 370	424 x 258 x 370
Inverter						
Output power continuous at 70°C	1500W	3000W	1500W	1500W	3000W	3000W
Output power surge	3000W	6000W	3000W	3000W	6000W	6000W
No load power	8W	12W	8W	8W	12W	12W
Input voltage	9.3 - 17VDC	18.6 - 34VDC	9.3 - 17VDC	18.6 - 34VDC	9.3 - 17VDC	18.6 - 34VDC
Output voltage	210 - 245VAC					
Output waveform	Pure sine wave					
Efficiency	82%	86%	82%	84%	84%	86%
AC Charger						
Input voltage	180 - 270VAC					
Maximum DC ripple	<1.25VRMS	<1.25VRMS	<1.25VRMS	<1.25VRMS	<1.25VRMS	<1.25VRMS
Output charge voltage	12 - 16VDC	24 - 32VDC	12 - 16VDC	24 - 32VDC	12 - 16VDC	24 - 32VDC
Charge current (main batteries)	70A	70A	70A	35A	140A	70A
Charge current (aux battery)	4A	4A	4A	4A	4A	4A
AC Input Switch						
Thermal circuit breaker	15A	30A	15A	15A	30A	30A
AC input fault detection time	4 - 10ms					
Trip level mains to inverter (user adjusted)	<180VAC	<180VAC	<180VAC	<180VAC	<180VAC	<180VAC
Trip level inverter to mains (user adjusted)	>187VAC	>187VAC	>187VAC	>187VAC	>187VAC	>187VAC

ACCESSORIES FOR COMBIUNITS

SunStar Solar Charge Controllers

Commercial grade solar charge controllers that can link with Combi Series units for centralised control

• See page 322





7	Cat.	Qty 1+	Qty 2+	Qty 4+
45A	MP-3726	\$329.00	\$299.00	\$265.00
60A	MP-3728	\$389.00	\$355.00	\$315.00

SunStar MPPT 50A Solar **Charge Controller**

High grade 50A MPPT solar charge controller for maximum charging efficiency.

Cat.

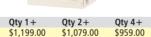
MP-3736

MS-5300

• See page 322







Mains Auto Transfer Switch

A high quality, 20A ATS that can link with Combi Series units to select between multiple AC inputs and adjust Combi settings accordingly.

• See page 339

20A





DC Voltage Sensitive Relay

Bi-directional voltage sensitive relay that can link with a SuperCombi unit for battery to battery charging, load control, DC charging, etc.







Solarworx Grid Inverter

A multi-purpose grid inverter that can link with a Combi Series based power system to create a hybrid on-grid/off-grid power system.

• See page 338



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71	Cat.	Qty 1+	Qty 3+	Qty 6+
2000W 12V	MI-5192	\$1,999.00	\$1,799.00	\$1,599.00
2000W 24V	MI-5194	\$1,999.00	\$1,799.00	\$1,599.00

Remote Control Panel

A full functioning wired remote control interface for the Combi Series units, allowing complete control and monitoring of your SuperCombi/CombiPlus from a separate location.



7		Cat.	Qty 1+	Qty 3+	Qty 6+
	Remote Control for SuperCombi	MI-5259	\$379.00	\$345.00	\$305.00
	Remote Control for CombiPlus	MI-5279	\$329.00	\$299.00	\$265.00

Multiphase Data Hub for Combi Series

Required to link multiple units for 2/3-phase configurations.





71	Cat.	Qty 1+	Qty 3+	Qty 6+
	MI-5276	\$179.00	\$160.95	\$142.95

Parallel Stack Data Hub for Combi Series

Required to stack multiple units to increase power output.





7	Cat.	Qty 1+	Qty 3+	Qty 6+
	MI-5277	\$179.00	\$160.95	\$142.95

Battery Temperature Sensor for Combi Series

Highly recommended to protect your battery bank. Com

ig the battery temperature sensibi Series units to adjust chargent depending on battery tempent	ing voltage and				
	Cat.	Qty 1+	Qty 3+	Qty 6+	
	MI-5278	\$69.00	\$61.95	\$54.95	

CombiPlus/SuperCombi Data Leads

Data leads for CombiPlus and SuperCombis. These allow data connection between our SuperCombi and CombiPlus units and their external accessories - such as DC switch controller (MI-5282) and solar charge controllers (MP-3726/MP-3728) - to allow the SuperCombi/CombiPlus to communicate directly and provide centralised programming and control of all components.

• Also required for parallel stacking of MP-3726 and MP-3728 solar charge controllers.

Specification	
Sheath	Black PUR, V90 flame retardant.
Conductor	Plain copper wire
Insulation	V75

7	Cat.	Qty 1+	Qty 3+	Qty 6+	
3m	WI-5250	\$35.00	\$31.45	\$27.95	
5m	WI-5252	\$45.00	\$40.45	\$35.95	
10m	WI-5254	\$55.00	\$49.45	\$43.95	



7

Caravan & Marine Power Systems

CARAVAN. RV & MARINE POWER PACKAGES

For those who are serious about taking the creature comforts with them whilst touring our fantastic country, or navigating our beautiful oceans and waterways, a serious power system is a must have. Here we have put together a range of power systems that will cater to the varying creature comfort levels and power demands of almost any caravan, RV, motorhome or marine vessel - ranging from a smaller entry level pack to a more serious system that packs a lot of punch.

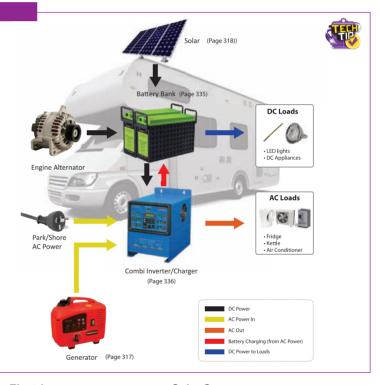


At the heart of these power systems is the fantastic, feature rich Invertek inverter-chargers from Rich Electric - a unit you can rely upon for serious power delivery in even the most extreme conditions. In order to store the power, we have included the industrial grade Amaron Sleek AGM deep cycle batteries, which feature a small footprint and seriously high power density. Of course all the other parts are included to provide solar power and dual battery charging - a complete system to make the most of cruising or touring holidays.



HOW IT WORKS

- Whilst the engine is running, the alternator provides DC charging into the house batteries via the dual battery isolator (or dual battery charging system), giving the bulk of charge whilst you are cruising around
- 2. When camped up or anchored, the solar panels convert sunlight into DC electricity, which is then used to charge the house batteries via the solar charge controller.
- 3. The SuperCombi/CombiPlus inverter-charger converts the stored DC electricity in the house battery to 240VAC electricity to run the appliances.
- When AC park/shore power is plugged in (i.e. when at a powered site/mooring), the SuperCombi/ CombiPlus uses that AC power to both charge the house batteries and deliver power to the AC loads.
- 5. DC appliances and loads can be powered directly from the house battery, with an option for load control (load control on Super- Combi only)
- 6. A 240VAC generator can be incorporated to provide auxiliary power to charge the house battery and power the 240VAC appliances.



BOOKS ON GREEN POWER

Solar that Really Works

The sun god Ra has been raining down free energy for about 4.5 billion years and only in recent years have humans developed the technology to capture it. This is an informative book that takes a practical look at the do's and don'ts of solar installation from caravans to fishing lodges. Contained within are detailed descriptions of working solar systems with illustrations. You won't be

left asking questions as the author has everything covered.

Softcover, 82 pages, Dimensions: 290 x 210mm



Qty 1+ BE-1535 \$42.50

Motorhome Electrics

A comprehensive text written primarily for owners, designers and builders of caravans, campervans and motorhomes who face unique power demands and challenges that most auto electricians are ill-equipped to properly address. This book spans the gap between auto electrical and alternative energy disciplines, providing thorough coverage of component definitions and applications, as well as thoughtful and straight-shooting advice on common electrical problems. An engaging read for those with a general understanding on the subject, it also features more technical

in-depth sections to assist trade electricians. Written by acclaimed Australian author and field expert Collyn Rivers, this is an essential reference for all caravan and motorhome enthusiasts

Softcover, 102 pages. Dimensions: 300 x 210mm

Freecall order hotline: 1800 022 888



Qty 1+ BE-1536 \$42.50

Solar Success -**Getting It Right Every Time**

A complete guide for home and remote property systems, this A complete guide for home and remote property systems, book is about using solar energy to reduce the fossil fuel generated electricity that produces our carbon footprint. Throughout it stresses the need for each of us to reduce unnecessary energy consumption before we think about generating more. This can be done by three associated and economically viable approaches: reduce energy usage by doing things differently, reduce energy usage by using more energy-efficient appliances, and, change the supply of energy

to non-fossil fuel through appropriate technology. A pragmatic no-nonsense approach to solar energy written by acclaimed Australian author Collyn Rivers, who walks the walk by showing his self-installed solar system on his 100% solar powered 10-acre property in the Kimberley Spiral bound softcover,



Caravan & Marine Power Packages

CARAVAN, RV & MARINE POWER PACKAGES (CONTINUED)

Caravan/Marine Pack #1.

12V-1500W, 160W Solar, 150Ah Battery

- Approx. 1.3kWh of stored battery power
- Approx. 0.4kWh (35Ah) average daily solar charging

- Most moderately powered household AC appliances
 Kettle, toaster, microwave (but only one at a time)

- Efficient LED lighting
 Efficient AC or DC fridge
- Laptops, DVD players, LCD TV, etc
 CombiPlus 1500W CAN run an efficient 2kW aircon system (but the battery wont last very long)

- Includes

 2 x 80W monocrystalline high efficiency solar panels

 12V 150Ah "sleek" deep cycle AGM battery

 Invertek CombiPlus 12V 1500W continuous (3000W max) inverter charger (70A charging)

 Powertech 12V 20A PWM solar charge controller

Cat.

MP-9011

- Powertech 12V 100A dual battery isolator (adjustable VSR)
 Solar panel connectors and joiners

Voltage

12V

Mega fuses

Watts

1500W

Caravan/RV/Marine Pack #2. 12V-1500W, 320W Solar, 300Ah Battery

Performance

Otv 1+ \$3,890.00

Refer to individual products for warranty details

- Approx. 2.6kWh of stored battery power
 Approx. 0.8kWh (70Ah) average daily solar charging

- Most moderately powered household AC appliances
- Kettle, toaster, microwave (but only one at a time)
- Efficient LED lighting Efficient AC or DC fridge
- Laptops, DVD players, LCD TV, etc
 SuperCombi CAN run an efficient 2kW aircon system (for a limited amount of time)

- 4 x 80W monocrystalline high efficiency solar panels
 2 x 12V 150Ah "sleek" deep cycle AGM batteries
 Invertek SuperCombi 12V 1500W continuous (3000W max) inverter charger (70A charging)
- SunStar 45A PWM solar charge controller Invertek 140A dual battery charging system
- CombiNet data leads
- Solar panel connectors and joiners
- Mega fuses

Refer to individual products

for warranty details

7	Voltage	Watts	Cat.	Qty 1+
	12V	1500W	MP-9013	\$5.540.00

Motorhome/Marine Pack #3. 24V-3000W, 525W Solar, 300Ah Battery

Performance

- Approx. 5.2kWh of stored battery power
- Approx. 1.6kWh (65Ah) average daily solar charging

- Most household AC appliances (preferably efficient)
 Kettle, toaster, microwave (bearing in mind max power output)
- Efficient LED lighting Efficient AC or DC fridge

- Laptops, DVD players, LCD TV, etc
 SuperCombi 300W CAN run an efficient 3kW aircon system, or 6kW inverter type split system (consider battery capacity though)

Includes

- 4 x 175W monocrystalline high efficiency solar panels
 4 x 12V 150Ah "sleek" deep cycle AGM batteries
 Invertek SuperCombi 24V 3000W continuous (6000W max) inverter charger (70A charging)
- SunStar 45A PWM solar charge controller
 Invertek 140A dual battery charging system
- CombiNet data leads
- Solar panel connectors and joinersMega fuses

Refer to individual products for warranty details





Clean renewable energy wherever you go. Solar-convert a 4WD or caravan to generate sufficient power to operate several appliances - including a laptop, portable lighting, CB radio and 12-24V camping electricals. Just add a battery or two for a self-sustained solar powered setup.

Four recreational solar package deals to choose from:

Standard Package 80W

Includes:

- 1 x 80W monocrystalline solar panel
- 1 x 12V 6A charge controller
- 2 x female PV connector
 2 x male PV connector

Cat 7M-9097 Cat MP-3128 Cat PS-5100 Cat PP-5102

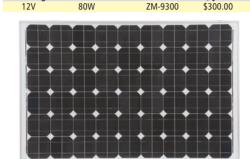
Qty 1+





Refer to individual products for warranty details





Premium Package #1 120W

Includes:

- 1 x 120W monocrystalline solar panel
- 1 x 12V 8A PWM charge controller
- 2 x female PV connector
- 2 x male PV connector

See fantastic new Battery Monitor Meter on page 324







Refer to individual products for warranty details





Includes:

- 2 x 80W monocrystalline solar panel
 1 x 12V 20A PWM charge controller
 3 x female PV connector
- 3 x male PV connector
- 1 x solar panel Y-lead 2 socket to 1 plug
 1 x solar panel Y-lead 2 plug to 1 socket

Cat ZM-9097 Cat MP-3129 Cat PS-5100 Cat PP-5102 Cat PS-5110





Refer to individual products for warranty details

7 Voltage Watts Qty 1+ Cat. 160W ZM-9303 \$680.00



Premium Package #3

- 2 x 120W monocrystalline solar panel
 1 x 12V 30A charge controller
- 3 x female PV connector
- 3 x male PV connector
- 1 x solar panel Y-lead 2 socket to 1 plug
 1 x solar panel Y-lead 2 plug to 1 socket

Cat 7M-9098 Cat MP-3722 Cat PS-5100 Cat PP-5102 Cat PS-5112



Refer to individual products for warranty details

Voltage Watts ZM-9306 12V 240W \$950.00

392

Folding Solar Panels

PORTABLE FOLDING SOLAR PANELS

Portable Fold-Up Solar Panel Kits

A convenient alternative energy solution for those on the move. Fold it away and store it in the carry bag when not in use, then when you set up camp just fold it out so your batteries (not included) are being charged. A stand is included so you can position the panel for optimum solar capture. Features alligator clamp connections on a 4m lead, has the charge controller included so you can connect directly to your battery (not included) without fear of over-charging, and is supplied with a durable nylon carry bag. Excellent for camping, 4WD, boating etc.

Specifications	ZM-9132	ZM-9130	ZM-9134
Pmax	40W	80W	120W
Rated voltage	12V	12V	12V
Voltage at pmax	17V	17.3V	18V
Current at pmax	2.35A	4.64A	6.67A
Open circuit voltage	21.5V	21.5V	22.5V
Short circuit current	2.61A	5.1A	7.4A
Weight	5.5kg	10.5kg	13.0kg
Dimensions:			
Onon	840(W) x 420(H) x	1090(W) x 623(H) x	1090(W) x 835(H) x
Open	36(D)mm	36(D)mm	36(D)mm
Folded	420(W) x 420(H) x	545(L) x 623(W) x	545(W) x 835(H) x
Tolucu	73(D)mm	73(D)mm	73(D)mm

7	Cat.	Qty 1+	Qty 2+	Qty 4+
40W	ZM-9132	\$279.00	\$269.00	\$255.00
80W	ZM-9130	\$479.00	\$459.00	\$435.00
120W	ZM-9134	\$699.00	\$665.00	\$629.00



Briefcase Amorphous Solar Chargers

Convenient briefcase sized solar chargers for keeping a car battery topped up while on holidays or in storage. Three sizes for small, medium and large cars or 4WDs. Each terminates in a cigarette lighter plug or alligator clips.

12V 2W Charger Cat ZM-9036 **12V 4W Charger** Cat ZM-9037 **12V 7W Charger** Cat ZM-9038



Specifications	ZM-9036	ZM-9037	ZM-9038
Pmax:	2W	4W	7W
Voltage(max)	18V	18V	18V
Current(max)	110mA	220mA	388mA
Dimensions			
Closed	185(L) x 154(W) x 34(H)mm	237(L) x 229(W) x 34(H)mm	335(L) x 250(W) x 36(H)mm
Open	304(L) x 185(W) x 17(H)mm	445(L) x 237(W) x 17(H)mm	492(L) x 335(W) x 18(H)mm

7	Cat.	Qty 1+	Qty 2+	Qty 4+
12V 2 Watt Charger	ZM-9036	\$24.95	\$22.35	\$19.70
12V 4 Watt Charger	ZM-9037	\$34.95	\$31.45	\$27.90
12V 7 Watt Charger	ZM-9038	\$59.95	\$53.95	\$47.90



HEAR WARREUTY

MOBILE BATTERY CHARGERS

Waterproof Solar Panels





These solar panels are ideal for charging sealed lead acid batteries. 2 models available. Supplied with mounting brackets, blocking diode, 2m output lead cable with alligator clips. Mounted in a plastic weatherproof case. Also ideal for marine use. They can be mounted on their brackets, and moved to follow the sun, or can be mounted flat on a surface. They are tough, and can be walked on if mounted flat (on a yacht or boat). Ideal for charging batteries in cars used infrequently.

Specifications	ZM-9016	ZM-9018
Wattage	1.26W	4.5W
Voltage (max)	18V	18V
Current (max)	Up to 70mA	Up to 250mA
Panel Dimensions	159(H) x 175(W) x 17(D)mm	187(H) x 255(W) x 17(D)mm

7		Cat.	Qty 1+	Qty 2+	Qty 4+	
18V	1.26W	ZM-9016	\$44.95	\$42.90	\$40.45	
18V	4.5W	ZM-9018	\$99.95	\$94.95	\$89.95	

Smart Solar Battery Charger - 100-120mA 15V



In sunlight, it supplies 15V at around 100-120mA of current. This is enough to keep a 12V battery that is infrequently used topped up. It is ideal for that second car, ride on lawnnower, tractor, boat, etc. It is housed in a plastic case, and has an output lead to cigarette lighter plug, with a LED which illuminates when the solar panel receives a charge.

Note, some cars will require this to be directly wired to the battery, as the cigarette lighter socket is disconnected when the ignition is switched off. Use the car lighter socket to battery clips PP-2007 for cars with switched lighter socket.

• Dimensions: 370(L) x 160(W) x 20(D)mm

7		Cat.	Qty 1+	Qty 2+	Qty 4+
15V	100-120mA	MB-3501	\$29.95	\$26.90	\$23.70

UHF TRANSCEIVERS (CB RADIOS)

80 Channel 0.5W UHF Transceiver

Keeps you clearly in touch with the kids at up to 3km range. Perfect for camping, picnics in the bush, skiing and hiking trips, it also features an integrated LED torch so you can find your way home in the dark. Requires 3 x AAA batteries.

- Integrated Blue LED Torch
- Up to 3km range
- 80 channels
- Push to Talk (PTT) function
- Electronic volume control
- Scan channel, call tone and monitor functions.
- Low battery alert
- Duplex function
- Dimensions: 122(H) x 54(W) x 35(D)mm

7			Cat.	Qty 1+	Qty 5+	Qty 10+
	80Ch	0.5W	DC-1001	\$24.95	\$22.35	\$19.70

80 Channel 0.5W UHF Transceivers Twin Pack

This 2 pack of mini UHF CB communicators can keep you clearly in touch with the kids at up to 3km range! Perfect for camping, picnics in the bush, skiing and hiking trips, they retain many of the features and build quality of more expensive units but come in a child friendly package. Features an integrated LED torch so you can find your way in the dark.

Supplied as a pair, in funky orange and green.

- Integrated Blue LED Torch Up to 3km range
- 80 Channels
- Push to Talk (PTT) function
- Electronic volume control
- Scan channel, call tone and monitor functions.
- Low battery alert



7				Cat.	Qty 1+	Qty 5+	Qty 10+
	80Ch	0.5W	Pair	DC-1003	\$49.95	\$44.90	\$39.90

80 Channel 0.5W UHF Transceiver

This lightweight hand-held transceiver is suitable for all manner of professional and recreational activities such as hiking, boating, kayaking, building sites, IT-cables, electricians, inter-car road trip communication or farming, etc. Open field transmission range is up to 5km, with typical city range up to one kilometer.



- Green backlit LCD screen 0.5W maximum RF output
- · No license required
- Requires 3 x AAA
- Dimensions: 115(H) x 65(W) x 35(D)mm

7			Cat.	Qty 1+	Qty 5+	Qty 10+
	80Ch	0.5W	DC-1021	\$49.95	\$44.90	\$39.90
	Snare Red	chargeable Rattery	DC-1029	\$14.95	\$13.35	\$11.70

80 Channel Rechargeable 0.5W UHF Transceiver

Out in the bush and you need to read a map in the dark? No problem! Your CB has an LED torch built in to it. Naturally it does all the normal CB functions as well and includes desktop charging cradle, AC adaptor, two transceivers and batteries.

- Power output: 0.5W
- Up to 3km range
- Up to 30 hours battery lifeCharging time: 6 hours
- 80 channels PTT function
- · Scan function
- · Auto squelch





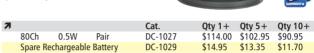
7			Cat.	Qty 1+	Qty 5+	Qty 10+
	80Ch	0.5W Pair with Charger	DC-1009	\$69.95	\$62.95	\$55.95

80 Channel 0.5W UHF Transceivers - Pair

Everything you need for mobile CB communications. 80 channel UHF CB radios complete with rechargeable batteries, dual charger cradle and a range of accessories. They have 0.5 watt output for up to 5km transmission range and CTCSS function. Ideal for bushwalking, camping, sports, etc.

- Sold as a pair
- No license required80 channels and 38 sub-channels
- Babysitter and parent-monitor
 VOX function
- Auto power off
- Stop watch Repeater function
- Automatic squelch Battery level indicators Key lock function
- Key tone function
- Backlit LCD
- · Supports external headset
- Supports external AC-DC charger

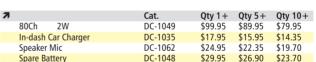
Spare Battery to Suit Cat. DC-1029



Advanced 80 Channel 2W UHF Transceiver with CTCSS

With 2 watts of output power, this UHF transceiver is certainly no toy. This top quality unit will suit many professional and leisure activities with a range of up to 10km line-of-sight. You can save battery power by switching to the low setting (500mW) for local communications (such as around the campsite). It's loaded with all the features you would expect from an advanced system like CTCSS that reduces interference from other users on the same channel, 75 voice channels, plus it has a rechargeable Li-ion battery with a plug pack charger.

- CTCSS function
- Hi/Lo power outputAuto squelch function
- Low battery display
- Backlit LCD
- Roger tone Li-ion rechargeable battery
- · Stop watch
- Dimensions: 120(L) x 57(W) x 35(H)mm



Air Tube Headset for Handheld CB Radios

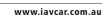
Ideal for people who use CB radios for extended periods of time because the air tube is much lighter and more comfortable than standard earpiece headsets. The collar clip secures the tube without inhibiting head movement and the in-line microphone features a push to talk button and mounting clip. Compatible with handheld UHF CB radios which feature a 3.5mm combination

microphone and earpiece plug including many from the range of Digitech handheld

- Compatible Digitech Radios: DC-1021, DC-1027, DC-1049, DC-1065
 Length from CB plug to microphone: 900mm
 Length from microphone to collar clasp: 550mm
- Air Tube Length: 250mm

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	DC-1031	\$39.95	\$35.90	\$31.90





Freecall order hotline: 1800 022 888

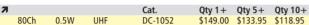
UHF & VHF Transceivers

UHF TRANSCEIVERS (CB RADIOS) (CONTINUED)

80 Channel 0.5W UHF **Transceiver Headset**

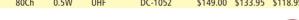
Enjoy the convenience of handsfree UHF CB communication. This has all the features you need from a 75 channel UHF CB headset, including ample 3km range, channel scanning, push to talk, and CTCSS. This adjustable headset with plug-in mic provides a high level of passive noise attenuation. They are perfect for a noisy environment, with all in one design and wireless go-anywhere ease and comfort, without missing a word in your conversation.

- 0.5W transmission power
- Up to 3km range
- 75 Channels
- Push to Talk (PTT) function
- Flectronic volume control
- Scan channel, call tone and monitor functions
- Low battery alert
- Adjustable headset with comfort padded ear cups
- Mains charger included



Ideal for marshalls

at sporting events, large construction



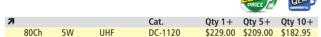
In-Dash 80 Channel 5W UHF Transceiver - 12VDC

Fixed installation UHF transceivers in your vehicle are always a better option as you get range and power. You'll always be connected to a higher gain antenna with a ground plane and you can always get more transmitting power as you aren't restricted to small batteries that hand-held units typically have.

All the usual UHF CB features, such as channel scan, repeater access and CTCSS. Ideal as a vehicle unit for 4WD etc.

- 75 channel
- Signal strength meter
 Up to 15km range
- line-of-sight Compact size for
- under-dash mounting
- · Microphone, lead and mounting bracket included

Product may vary from picture



5W 80 Channel UHF Transceiver

Remarkable range and clarity. With a powerful 5W output you'll be able to communicate far beyond consumer grade models. For short range banter, you can switch to power-saving 1W output so you can recharge later rather than sooner. Other features include 80 channels with CTCSS, channel scan, VOX and repeater functions. Includes Li-Ion rechargeable battery pack, AC adaptor, charging cradle and belt clip.

- Range: 3km/12km
- 1W/5W switchable output power
- 80 channels
- CTCSS sub channel calling
- LCD backlit display
- Dual watch
- VOX function Repeater function
- Detachable antenna
- Key lock function
- Channel scan function
- Auto power saver mode
- Dimensions (without antenna): 130(L) x 60(W) x 35(D)mm
- Antenna: 165mm long

7				Cat.	Qty 1+	Qty 5+	Qty 10+
	80Ch	5W	UHF	DC-1065	\$149.00	\$133.95	\$118.95
	In-car cha	arging ca	ıble*	DC-1097	\$17.95	\$15.95	\$14.35

In-car charger available separately (*Note: The USB charging socket requires 12V, standard 5V USB power

supplies will not suit.) DC-1097

Console 80 Channel 5W UHF Transceiver - 240VAC

Most UHF base stations transceivers are vehicle units adapted to the job. This one is specifically designed as a base station unit as it runs from mains power and is designed to be installed in a console or cabinet. It features channel scan, CTCSS, repeater access and maximum legal power output of 5W. Ideal for farmers, 4WD clubs etc.

- 5W transmission power
- 240VAC powered
- 75 channel

III III

- Signal strength meter
- Up to 15km range line-of-sight Console mounting
- Mic and lead included

Product may vary from picture

7				Cat.	Qty 1+	Qty 5+	Qty 10+
	80Ch	5W	UHF	DC-1130	\$229.00	\$209.00	\$182.95

VHF TRANSCEIVER

5W VHF Marine Radio Transceiver

You should never head out to sea without a VHF radio. If you plan on doing a bit of sailboat racing, the club rules will probably make a VHF radio compulsory on-board equipment. This powerful 5W hand-held transceiver gives you coverage of all international VHF marine channels. Though not completely submersible, the housing is compact and splash proof, specially designed to endure the usual rigours of boating. The antenna is detachable so units can be connected to a larger antenna mounted on a boat. Includes Li-lon rechargeable battery pack, AC adaptor, charging cradle and belt clip.

DC-1097

- 1W/5W switchable output power
- Backlit LCD
- · Dual and triple watch function
- Channel scan function

One-touch emergency channel 16 Auto power saver mode Cat. Otv 1+ Qty 5+

In-car charger available separately

(*Note: The USB charging socket requires 12V, standard 5V USB power supplies will not suit.)



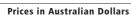
UHF CB Radio - What you need to know

You will see that we have a full range of UHF radios with 80 channels. In 2011 the Australian Communications and Media Authority (ACMA) introduced the new 80 channel UHF standard which supersedes the 40 channel standard. 40 channel units can be used until June 2017.



A few things to note are the channel allocation. Channels 5 & 35 are reserved for emergency only, and misuse of these channels carries heftyfines or jail time. Besides these, the truckies use channel 40, 18 is the caravan and campers channel. Channels 1-8 and 31-38 are for repeater use, the latest standard states that 41 – 48 and 71 -78 may also become available for repeater operation to supplement the other repeater channels. Presently speech telephony is inhibited on channels 22 and 23 (i.e. data only). Channels 61, 62, and 63 are currently are not activated on all UHF units until approved by the ACMA at sometime in the future (In about 5 years time).





ACCESSORIES TO SUIT UHF TRANSCEIVERS

12VDC CAR CHARGERThis charger plugs directly into your vehicle's cigarette lighter socket and the transceiver to charge 3 x AAA Ni-MH batteries. It will not power the transceiver.

• Suits DC-1021/DC-1027

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	DC-1036	\$17.95	\$15.95	\$14.35

MAINS CHARGER

Charges 3 x AAA Ni-MH batteries, will not power the transceiver.

• To suit DC-1021/DC-1027

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	DC-1034	\$17.95	\$15.95	\$14.35

Use these black vinyl pouches to protect and secure your transceiver to your belt.

• Sprung metal belt clip (similar to standard mobile phone case) Material: Vinvl • Colour: Black

To suit DC-1027 use Cat. DC-1018

To suit DC-1027/49 use Cat. DC-1042

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	DC-1018	\$6.95	\$6.25	\$5.50
	DC-1042	\$9.95	\$8.75	\$7.75

HANDS FREE EARPIECE WITH THROAT MICROPHONE

The hands free fits snugly in your ear and around your neck blocking out virtually all background noise.

• Cable: 104.5cm long cable

• Suits DC-1021/27/49





Cat. DC-1018



VOX HEADSET AND MICROPHONE

Designed to comfortably fit over one ear, with an inline microphone & PTT button the 1.2m long cable can be neatly tucked to one side with the incorporated lapel clip.

• Suits DC-1021/27



Cat. DC-1042

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	DC-1032	\$14.95	\$13.35	\$11.70

UHF ANTENNAS & ACCESSORIES

UHF Slope Adjustable Whip

Designed to fit late model vehicles with sloping guards and bonnets.

- Length 610mm
- 470 520MHz
- 4dB gain

2

	3				
7		Cat.	Qty 1+	Qty 5+	Qty 10+
		DC-3072	\$24.95	\$22.35	\$19.70

UHF 4.5dB Black Whip

Offers at least 4.5dB gain.

- Black powder coated
- Stainless steel whip Length 565mm
- Suits standard UHF 5/16" base Cat. DC-3062

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	DC-3074	\$22.95	\$20.35	\$18.35

UHF Antenna Base with 3.6m Coax and PL259 plug

Fully assembled and terminated to help get your in-dash UHF transceiver operational sooner and more easily. Supplied is a standard UHF antenna base connected to 3.6m of RG58C/U coaxial cable which in turn is terminated to a PL259 connector that will screw into the rear of standard UHF transceivers





Bluetooth® Motorcycle Headset

Communicate wirelessly whilst riding your motorcycle. You can buy two AR-1864 units and pair them together, giving you an intercom between rider and pillion. It incorporates a digital signal processor to reduce wind and road noise. It enables you to pair two devices simultaneously, such as two mobile phones, or a mobile phone and another AR-1864 (as mentioned earlier). Included is GPS support (from a Moto-friendly GPS), and is designed for use in all weather (IPX6 certified). The large buttons ensure it is easy to adjust the volume even whilst wearing gloves. Includes Velcro pieces with double sided tape to enable easy mounting to

Dimensions: Base unit:- 100(L) x 20(W) x 35(H)mm Mic & Boom:- 235mm long (including mic

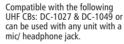


7	Cat.	Qty 1+	Qty 3+	Qty 6+
	AR-1864	\$99.00	\$88.95	\$78.95

Motorcycle Headset for UHF CB Transceiver

Just plug this mic and speaker headset into the mic/headphone jack on a compatible UHF CB and you have instant hands-free communications. Add a second set and use it as a bike to bike or rider to pillion intercom. Designed to fit into a full-face helmet with the included self-adhesive Velcro® mounts, it can be easily removed from your helmet when not in use.

It also has a push-to-talk button that mounts on the handlebar with a sturdy velcro strap and can also be removed when not in use.



Headset cable length: 1.6m PTT button cable length: 1.3m



Installed

Microphone



Installed Pushbutton

Fits inside

your helmet

Note: Helmet not included (nor is the Stig!)

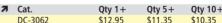
7	Cat.	Qty 1+	Qty 5+	Qty 10+
	DC-1037	\$119.00	\$106.95	\$94.95

RELATED PRODUCT

Full range of antennas page 397 & connectors on page 199

UHF Base

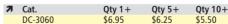
Constructed from UV stable polypropylene and a 5/16", 26TPI plated brass bolt.



Qty 10+ \$12.95 \$11.35 \$10.35

Universal CB Base

Standard 5/16" 26TPI low profile base complete with solder lugs for cable connection.





Trunk Groove Bracket

Suitable for mounting in the groove of your boot or bonnet. Simply lift boot or bonnet and drill two holes and screw down and mount the base, and run cable. A relatively easy way to get on the air without drilling noticeable holes in your panels.





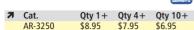
7	Cat.	Qty 1+	Qty 5+	Qty 10+
	DC-3079	\$8.90	\$7.95	\$6.95

CB Accessories & Alcohol Breath Testers

CAR ANTENNAS

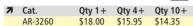
Standard Lockdown

- 4 section
- Extends to 770mm
- · Cable length 1.2 metre



Rubber Topmount

- Small rubber antenna bends when it hits
- something.
 Good for 4WDs etc.
- 1 section
- Length 350mmCable length 1.2 metre.











Trunk Groove Bracket

Suitable for mounting in the groove of your boot or bonnet. Simply lift boot or bonnet and drill two holes and screw down and mount the base, and run cable. A relatively easy way to get on the air without drilling noticeable holes in your panels.





7	Cat.	Qty 1+	Qty 5+	Qty 10+
	DC-3079	\$8.90	\$7.95	\$6.95

Car Aerial Extension

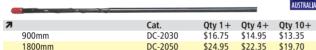
Need a longer aerial lead in your car?

- Standard aerial socket to plug.
- Length: 3 metre

7	Cat.	Qty 1+	Qty 4+	Qty 10+
3m	AR-3253	\$8.95	\$7.95	\$6.95

27MHz Helical Whip

High performance helical fibreglass mobile whips designed and manufactured in Australia to suit our rugged conditions. All with standard 5/16" 26TPI thread



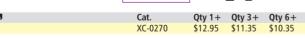
STOP WATCHES

Sports Stopwatch

This handy 1/100th of a second sports timer will be a useful addition to any sports bag. Not only does it measure elapsed time for up to 24hrs, our water resistant stopwatch has a split time (Lap) function as well as alarm and calendar functions

- Dimensions: 55(W) x 65(H) x 15(D)mm
- · Includes 600mm lanyard

NOTE!!!	
Thousands Sold	



High Performance Stopwatch

For those who need more than the XC-0270 Stopwatch. This unit will do; 999 laps & splits, fastest, slowest & average lap display. Up to 100 laps memory record. It can count rowing stroke rates. It has a pacer function for training, dual timer and more. Lithium battery included. Black in colour. Comes with lanyard

• Dimensions: 68(L) x 82(W) x 21(H)mm





			-	_	
7	Cat.	Qty 1+	Qty 3+	Qty 6+	
	XC-0287	\$24.95	\$22.35	\$19.70	

ALCOHOL BREATH TESTERS

Alcohol Breath Tester

It measures up to a blood alcohol level of 0.2% - above that and you probably won't be able to walk. Response time is less than 8 seconds - all you do is wait about 10 seconds then blow into the sensor to give a reading in blood alcohol percentage or mg/litre. Requires 2 x AAA batteries.

- · Compact purse or glove box size
- <8 second response time
- Low battery indicator
- Backlit LCD
- Dimensions: 103(I) x 37(W) x 19(H)mm

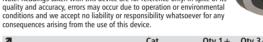


7	Cat.	Qty 1+	Qty 3+	Qty 6+	
	QM-7298	\$19.95	\$17.70	\$15.70	

LCD Alcohol Breath Tester

Don't get behind the wheel if you're over the limit. Test yourself first with your own breathalyser. It takes a reading in less than five seconds and can sound an alarm at a preset level.

- Accuracy of .04mg/L
- Low battery indication
- Backlit LCD
- Requires 3 x AAA batteries
- Spare mouthpieces pack 10 (sold separately): Cat. QM-7297
- Dimensions: 105(H) x 62(W) x 25(D)mm



7		Cat.	Qty 1+	Qty 3+	Qty 6+
	Breath Tester	QM-7296	\$49.95	\$44.90	\$39.90
	Replacement Mouth Pieces	QM-7297	\$9.95	\$8.75	\$7.75

Compact Fuel Cell Alcohol Breath Tester

Note: Readings taken with this device are for reference only. In spite of its

Most of the consumer alcohol analysers on the market have semiconductor sensors. Their reliability and accuracy is limited to say the least, and some are little more than toys. A fuel cell provides far greater accuracy, will give readings with better reliability and is the technology used by law enforcement for years. Just blow in the mouthpiece for a reading in seconds. While it's not cheap, it's a lot less than the lowest fine for DUI and significantly cheaper than most other fuel cell analysers. Requires 3 x AAA batteries (use SB-2413)



- Backlit LCDAlert at 0.05%
- Pk10 spare mouthpieces Cat QM-7303
- Dimenions: 105 x 45 x 20mm





Note: Readings taken with this device are for reference only. In spite of its quality and accuracy, errors may occur due to operation or environmental conditions and we accept no liability or responsibility whatsoever for any consequences arising from the use of this device.

7		Cat.	Qty 1+	Qty 3+	Qty 6+
	Alcohol Tester	QM-7302	\$119.00	\$106.95	\$94.95
	Spare Mouthpieces - pack of 10	QM-7303	\$4.95	\$4.45	\$3.90

JAYCAR CARRY BAGS

Jaycar Cooler Bag

Take a few frosty ones to the cricket - or a bottle of chardonnay if you like to bowl from the Paddington end. Lined with insulation and holds a 6-pack.

• Dimensions: 260(W) x 260(H) x 120(D)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	HB-5005	\$2.95	\$2.60	\$2.30

Jaycar Enviro-Bags

Do your bit for the planet and reduce landfill with this reuseable and environmentally-friendly bags. Plastic bags might be illegal soon, so now is a good time to get with the program. Fill it full of Jaycar goodies, then use it for the groceries. Two sizes:

• Dimensions: 340(W) x 320(H) x 220(D)mm

• Dimensions: 480(W) x 380(H) x 150(D)mm

* Free with any purchase over \$50! (limit of one bag per purchase)

71	Cat.	Qty 1+	
Small	HB-5002	\$1.30	
Large	HB-5000	\$1.50	



Jaycar

Wireless Weather Stations

WIRELESS WEATHER STATIONS

Weather Station LCD Keyring

A weather station that fits in the palm of your hand, this nifty LCD keyring shows weather forecast, current temperature, humidity, time, date and moon phase. It also has an alarm clock with snooze button. Complete with inbuilt LED torch and compass, this mini survival tool is ideal for camping, bushwalking, fishing and the great outdoors.

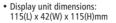
- Batteries included
- Celsius or Fahrenheit
- Max/min temperature and humidity memory
 Dimensions: 93(H) x 50(W) x 18(D)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	XC-0341	\$19.95	\$17.70	\$15.70



Weather Station with Wireless RF Sensor

The internal unit can be either wall or desk mounted and features a large LCD with full clock and calendar functions, dual indoor/outdoor temperature readings, humidity, barometric pressure and weather trend. Supplied with the unit is an external transmitter to measure outdoor









Cat. Qty 3+ XC-0335 \$39.95 \$35.90 \$31.90



Deluxe Weather Station LCD Keyring

This product is for canoeists, abseilers and other outdoor types. It is a compact weather station, altimeter, timer, alarm clock and ordinary clock (etc.). It also has a nifty little handle that goes straight on to your carabiner. Seriously, this product makes an attractive accessory for outdoorsy types. We make no promises for the weather forecasting function, but we do know that they have been very popular in the UK and we know been very popular in the UK and we know the control of the control of the UK and we know the control of the UK and the UK a we know how obsessed with weather they



• 70(L) x 45(W) x 15(D)mm (less handle)





-40 to 59.9°C (-40 to 139.8°F 1 to 99% RH rireless outdoor temperature Wireless outdoor humidity 0 to 180kmh (0 to 50ms or 0 to 111.8mph) Wind speed and gust Indoor temperature 0 to 59.9°C (32 to 139.8°F) Measurements 135(W) x 34(D) x 140(H)mm 110(H) x 180(Dia)mm Outdoor wind sensor Temp/bar/humidity sensor 57(W) x 57(D) x 160(H)mn

Mini Wireless Weather Centre

You don't need to be a meteorologist to be a weather expert. Keep up-to-date with current and forecasted atmospheric conditions at a glance. With two small outdoor weather sensors, this mini pro wireless weather centre precisely measures, records and forecasts all the basic weather parameters that you need and displays them on a LCD screen. All parts come ready assembled in the box so you can easily set it up in a matter of minutes. Handy features include three forecast icons based on changing barometric pressure; indoor temperature, outdoor temperature and humidity, barometric pressure with history graph and much more. LCD screen comes with inbuilt desk stand or can be easily wall mounted.

- Barometric pressure with 12 hour history graph
- Storm warning indicator
- Weather tendency arrow
 History records of all measurements stored every three hours 140 records total
- Min/Max records of wind and weather data with time and date

Wireless rain guage to suit sold separately Cat XC-0347



\$69.00

Otv 1+

\$129.00





XC-0347

Weather Station with Clock and Photo Frame

Keep tabs on the weather, the time and display photos of the nearest and dearest. A remote sensor sends weather data to the display unit which provides temperature, humidity, trend and forecast information and also displays indoor temperature. Photos can be loaded by a host PC, via SD/MMC card or USB flash drive. Mains plugpack included.

Cat.

XC-0345

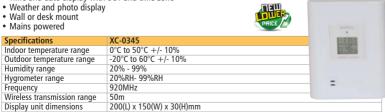
XC-0349

XC-0347

Wireless Weather Station

Rain guage to suit

- 12/24 hour clock with alarm
 Time and date display with DST and time zone
- Wall or desk mount



Freecall order hotline: 1800 022 888



\$115.95





\$102.95

Solar powered

Wireless Weather Stations

WIRELESS WEATHER STATIONS (CONTINUED)

Wireless Weather Station with Solar Powered Sensor

A feature-packed weather station for the enthusiast forecaster. The outdoor sensors are powered by a solar panel and will monitor up to 10 key weather parameters. The data is transmitted up to 50 metres to the indoor base station to keep you updated on current and future weather conditions. Solar powered means you'll never have to think about battery replacement. The station will measure indoor/outdoor temperature, relative humidity, rain, wind speed, wind chill, dew point, barometric pressure and also displays the date and time. All minimum and maximum values with the date and time it was recorded will be stored for your reference on an easy to read display screen.

The unit includes a weather tendency indicator that will display 1 of 4 icons (sunny, cloudy, partly cloudy or rainy) indicating the likelihood of future weather. When the sensors detect a pressure fall of 3 - 9hPa, a storm warning will be displayed on-screen. The storm threshold value is user adjustable. Alarms for certain weather conditions can be programmed to alert you to potential atmospheric hazards. If you enjoy outdoor activities that require specific weather conditions the alarm feature is a great tool to give you accurate information on potential trouble. Base station requires 3 x AA batteries.

Features:

- Solar powered sensor
- Indoor and outdoor temperature display in Celsius or Fahrenheit
- Wind speed display in kmh, mph, knots or Beaufort scale
- Wind chill
- Rainfall data ranging from 1 hour up to 1 month or total since last
- Records all minimum and maximum values with time and date of their recordings Dew point display Celsius
- or Fahrenheit
- Weather forecast (sunny, cloudy partly cloudy, rainy)
- Storm warning alarm Weather alarm modes for
- temperature, humidity, wind chill, dew point, rainfall, wind speed, air pressure, storm warning
- · Perpetual calendar

Specificiations 0°C to 50°C +/- 10% -40°C to 65°C +/- 10% Indoor temperature range Outdoor temperature range Humidity range 99% 1%RH- 99%RH Hygrometer range Wind chill Yes Wind Speed Rain gauge Dew Point 0 - 9999mm Yes Wind Direction
Weather history record No Yes Barometric Pressure Frequency Wireless transmission range 433MHz 50m 150(L) x 30(W) x 160(H)mm 570mm (with sensors: 630mm) Display unit dimensions Height of outdoor mast



Spare part - sold separately 2 x Spare rechargeable alkaline batteries Cat. XC-0343

7		Cat.	Qty 1+	Qty 3+	Qty 6+
	Wireless Weather Station	XC-0346	\$149.00	\$133.95	\$118.95
	Spare battery (Pk 2)	XC-0343	\$9.95	\$8.75	\$7.75

Touch Screen USB Wireless Weather Station with Solar Powered Sensor

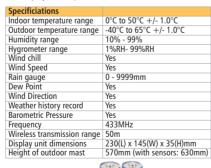
A highly advanced weather station with an unbeatable range of features to keep you fully updated on current and future atmospheric activity. The outdoor sensors are simple to install and will wirelessly transmit data to the base station which interprets and displays the data on the touch screen panel. You can also connect the base station to your PC through USB and upload all recorded weather data for more in-depth analysis. Now supplied with a solar panel with rechargeable batteries, it can be installed remotely and never worry about battery replacement. The sensors will read indoor/outdoor temperature, wind speed, wind chill, wind direction, dew point, humidity, rainfall and barometric pressure and is solar powered so you don't have to think about batteries. The weather tendency indicator will inform you of changing conditions based on fluctuating barometric pressure and there are programmable alarm modes for all of the recordable weather conditions so you will know if a storm is coming or if winds are too gusty for your Sunday picnic. All minimum and maximum weather values are recorded with the time and date of recording and are stored on the base station for your reference. Display unit requires 3 x AA batterie

Features

- Solar powered sensors
- · Touch screen LCD panel
- Wind speedWind direction
- Wind chill
- Dew Point
- · Weather forecast tendency arrow
- Weather alarm modes for: temperature, humidity, wind chill, dew point, rainfall, wind speed, air pressure, storm
- Time display hours, mins, date
 100 year calendar display
- Weather symbols and
- barometer tendency display
- Perpetual calendar
- LED backlight

Spare part - sold separately

2 x Spare rechargeable alkaline batteries Cat. XC-0343

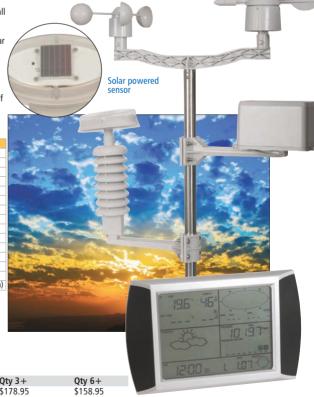








7		Cat.	Qty 1+	Qty 3+	Qty 6+
Wireless Wea	ther Station	XC-0348	\$199.00	\$178.95	\$158.95
Spare Battery	(Pk 2)	XC-0343	\$9.95	\$8.75	\$7.75



WIRELESS WEATHER STATION WITH PHOTO FRAME

7" LCD Wireless Weather Station with Digital Photo Frame

Keeping an eye on the weather need not be a dull experience. This full function weather station has a 7" LCD that will display all the parameters in full colour. It has two easy to mount outdoor wireless weather sensors that will show the temperature, humidity, wind speed and direction as well as rainfall data. It will also display a barometric weather forecast with historical pressure bar graph. The display unit will not be out of place in your desk, wall or bedside table as it also doubles as a digital photo frame. Unit accepts USB, SD and MMC cards and supports JPEG and slideshow functions. A calendar and alarm function is also integrated in this feature packed device.

- · Wireless anemometer and
- rain gauge
 7" TFT LCD screen
- Resolution: 800 x 480 Pixels
 Memory: USB flash drive,
- SD & MMC card
- IR remote control included Supports slideshow & JPG

Specifications	XC-0357
Indoor temperature range	0°C to 50°C
Outdoor temperature range	-20°C to 60°C
Temperature Accuracy	-
Hygrometer Range	20%RH - 99%RH
Wind chill	-
Wind speed	0 - 30m/s
Rain gauge	0 - 9999mm
Dew point	-
Wind direction	Yes
Weather History Record	-
Barometric	No
Frequency	920MHz
Wireless transmission range	30m
PC connection	USB
Display Dimensions	235(L) x 161(H) x 41(D)mm
Sensor Mast Height	

Qty 1+

\$199.00











SOLAR POWERED CLOCKS & THERMOMETERS

Cat.

XC-0357

Solar Powered Thermometer with Hygrometer and Outdoor Temperature Sensor

A compact solution for monitoring indoor and outdoor temperatures. It also measures indoor humidity displaying both a percentage and a comfort level indicator. Automatically records and updates min, max temperatures Convenient for home use or during travel



- Min/Max temperature and humidity records
- Monitors indoor humidity (%RH)
- Humidity Comfort level indicator
- Outdoor temperature sensing probe with 1.5m cable Dimensions: 83(W) x 52(H) x 14(D)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-7319	\$19.95	\$17.70	\$15.70

Solar LCD Clock with Calendar & Temperature

Ideal for home or office workspaces, this easy-to-read LCD clock has several additional handy features. Its large 55mm numerical time format & alarm function is complemented by a calendar date & temperature display in either Celsius or Fahrenheit. It's powered by 2 x AA batteries with auxiliary solar cells to prolong battery life. Suitable for wall mounting. LREZ!

• Dimensions: 250(H) x 250(L)mm



Cat.	Qty
AR-1761	\$10

DESKTOP THERMOMETERS

Indoor Desk Thermometer

Handy desk or table-top thermometers. Measures degrees Celsius with hi and low memory. Tilting bail for standing on desk purposes. Indoor only or indoor/outdoor type.

· Battery included

Otv 3+

Specification	IS
Range	-20 - 50°C
Dimensions	64(W) x 72(H) x 18(D)mm

Qty 6+	
\$4.75	
	Ψ σ

Jumbo Display In/Out Thermometer

One display that shows both the inside and outside temperatures simultaneously. It will also record the minimum and maximum temperatures. The outside temperature sensor is waterproof and is on a 3 metre cable. It also has a tilting bail for standing as well as a keyhole for wall mounting. Jumbo digits for the optically challenged.

3pecineation3	
Temperature range	
	-39.8°F to 122°F
Battery	Requires AA
Dimensions	95(W) x 140(H) x 22(D)mm

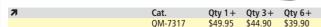


7	Cat.	Qty 1+	Qty 3+	Qty 6+
	OM-7310	\$19.95	\$18.70	\$15.70

Wireless Solar Powered Clock with Indoor/Outdoor **Temperature and Humidity Sensors**

Check the time as well indoor/outdoor temperature and humidity readings Both the main unit and wireless outdoor sensor are powered by rechargeable alkaline batteries topped up by modern, high-efficiently solar panels able to maintain a full charge with minimal sunlight. It records and automatically updates MIN and MAX temperatures.

- · Wireless outdoor humidity/temperature sensor
- Wireless receiver requires 2 x AA rechargeable alkaline batteries (included); can use 2 x AA non-rechargeable alkaline batteries with the flip of a switch
- 12 Hour time display
- Low battery indicators
- Receiver dimension: 90(L) x 144(H) x 28(W)mm
 Sensor dimension: 32(L) x 86(H) x 14(W)mm



Jumbo Display Thermometer/Hygrometer

Displays the temperature and humidity together on the one huge LCD display. It also has a min / max function (memory). Switch between C° and F° Requires AAA battery

Specification	15
Temperature	-10° - 60°C (14° - 140°F)
Humidity	10 - 99% +/-5%
Accuracy	+/-1°C, +/-1.8°F
Dimensions:	110(H) x 100(W) x 22(D)mm



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-7312	\$24.95	\$23.35	\$19.70

400

Thermometers & Auto Reversing Cameras

THERMOMETERS (CONTINUED)

LCD Probe Thermometer

Multi-purpose digital thermometer for the kitchen, lab, factory, workshop or barbeque. It measures in Celsius and Fahrenheit and fits in a pocket.

• Stairness steer pr	obe	72
Specifications		Ca
Temperature range	-50 - 120°C, -58 - 248°F	
Accuracy	+/-1°C	
Length	150mm	

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-7314	\$9.95	\$9.25	\$7.75

Mini Indoor Thermometer

This handy little thermometer is ideal for monitoring the temperature inside the house or the car, shed. fernery etc. The display unit is unobtrusive and can be mounted directly onto a wall.

Specifications	
Dimensions	50(W) x 35(H) x 20(D)mm.
Usage	Indoor Only
Range	-10°C to +50°C



CRAZL

SOLAR POWERED CLOCKS

Solar Powered Alarm Clock with Laser Projection

Project the time on your wall or ceiling! A sleek matt-silver finished alarm clock with clear LCD time, calendar and temperature display. It projects the time when the alarm goes off or when you press the button.

- 12/24 hour time
- °C / °F temperature
- 2 x AAA batteries (not included) with solar cell to prolong battery life
 • Dimensions: 165(L) x 35(W) x 110(H)mm

7	Cat.	Qty 1+
	XC-0214	\$14.95

Solar LCD Calendar Alarm Clock

Stylish slim-line design, this functional time piece is equipped with the modern essentials. Featuring a crisp LCD to display time, calendar and temperature, it has a dual alarm with snooze button and a solar cell for auxiliary power.

- 12/24 hour time and °C/°F temperature Requires 2 x AAA batteries
- Dimensions: 80(L) x 41(W) x 152(H)mm



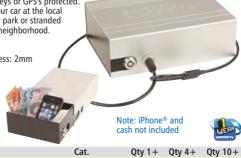


CAR SAFE

Portable Aluminium Car Safe with Alloy Cable Strap

Keep your personal effects secure with this portable car safe! The clever designed locking mechanism clamps down the alloy strap across the stainless steel case and aluminum cover making this safe virtually unbreakable. Attach the included 1m alloy cable strap to your seat railing and neatly tuck it under your seat or place in the boot of your car. Perfect for keeping your mobile phones, camera's, wallets, keys or GPS's protected. Great for leaving your car at the local shopping centre car park or stranded overnight in a bad neighborhood.

- Weight: 1.3kgAluminum thickness: 2mm
- Stainless steel thickness: 1.2mm
- · Dimensions: 210(L) x 150(W) x 68(H)mm



HB-5455 \$22.35

REVERSING CAMERAS & KITS

Flush Mount Mini Waterproof Camera for Cars or Trucks

Designed for use in vehicles to give drivers a clear view of car or truck blind spots. Reversing into tight spots, or parking in low light underground car parks is fraught with danger so any extra information being fed to you is going to help. A lengthy 5m composite RCA cable, a 730mm power cable, and the appropriate sized hole saw are included.

Specifications:	
Sensor	CMOS
Resolution (H x V pixels)	628 x 512
Horizontal resolution	420TV Lines
Max aperture	f1.2
Minimum illumination	0 lux
Composite cable length	730mm
Power supply	12VDC
Lens view angle	170 degree
Dimensions	31(L) x 20(Dia)mm
	- (, - (- ,



7	Cat.	Qty 1+	Qty 2+	Qty 4+
	QC-3513	\$89.95	\$80.95	\$76.50

Colour CCD Wide Angle Waterproof Rear View Camera

A camera designed to assist drivers reversing their vehicles. The tiny camera is easily mounted with the attached mounting bracket and screws. Ideally it should be fixed to an area above your rear licence plate, or any area other suitable nearby area. The wide angle lens and minimum illumination of 0.2 Lux will you give you a more than adequate view of potential hazards behind your vehicle.

Specifications:	
Sensor	CCD
Resolution	512 x 582
Horizontal resolution	420 TV lines
Minimum illumination	0.2 lux
Max aperture	f1.2
Current draw	<50mA
Power supply	12VDC
Lens angle	170 degrees
Dimensions	27(L) x 20(W)mm



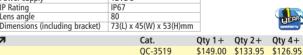
Cat.	Qty 1+	Qty 2+	Qty 4+
QC-3514	\$119.00	\$106.95	\$100.95

Bus / Truck Camera with Infrared LEDs

At times, anonymity breeds disobedience and places like buses can become a haven for anti-social behaviour. Littering and vandalism can affect the environment for everyone. This tough unit can be

firmly mounted inside as a surveillance camera or outside as a reversing camera. The camera is fitted to a solid bracket that can be rotated in a vertical motion for the optimal view. An RCA composite video and audio connection are fitted for compatibility with most in dash and security LCDs. Infrared LEDs will allow night vision so nothing will escape the cameras view.

Specifications:	
Sensor resolution (H x V pixels)	510 x 492
Horizontal resolution (TV lines)	420
Minimum illumination	0.3 lux
Power supply	12VDC
IP Rating	IP67
Lens angle	80
Dimensions (including bracket)	73(L) x 45(W) x 53(H)mm



Wireless 2.4GHz Rear View Mirror Reversing Camera



Wireless technology makes for easy installation. The monitor fits securely over your existing rear view mirror and can be quickly removed when needed. The brackets are adjustable so it will fit mirrors from 55 - 85mm wide and it's powered simply by plugging it into a cigarette lighter socket. It incorporates a reversing camera that transmits video signals via 2.4GHz frequency to the monitor so there's very little wiring to be done. The camera can be mounted internally or externally

Specifications	
LCD	3.5"
Power	12VDC
Range	80m
Dimensions	280(L) x 95(H) x 26(D)mm



7	Cat.	Qty 1+	Qty 2+	Qty 4+
	OM-3795	\$199.00	\$178.95	\$158.95

Auto Reversing Comeros

REVERSE CAMERA KITS (CONTINUED)

Wireless 2.4GHz Reversing Camera and LCD 3.5" Monitor

Reversing cameras can be tricky to install, especially running video and other cables under the dash to the display unit. Like a GPS, the LCD on this unit plugs straight into your car's cigarette lighter socket and receives video via 2.4GHz wireless from the reversing camera. The

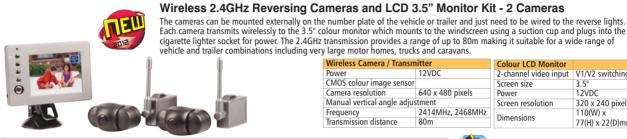
camera can be mounted internally to fire through the rear window or externally on the number plate or bumper. Transmission range is up to 80m, so is suitable for very large motorhomes, trucks or





Cat. QM-3796 Qty 1+ \$199.00 Qty 2+ \$178.95





vehicle and trailer combinations including very large motor homes, trucks and caravans.

Wireless Camera / Transmitte CMOS colour image sensor Camera resolution 640 x 480 pixels Manual vertical angle adjustment 2414MHz 2468MHz Frequency Transmission distance

\$198.95

Colour LCD Monitor 2-channel video input V1/V2 switching Screen size 12VDC Power Screen resolution 320 x 240 pixels 110(W) x Dimensions 77(H) x 22(D)mm

OM-3797 \$249 00 Reversing Camera with 5" LCD Monitor - Wired

An all-in-one reversing camera kit with a 5" slimline LCD. The kit includes a powerful suction mount bracket that allows you to swivel the vertical angle of the screen through a 90 degree range and a tiny reversing camera. Once activated, the LCD shows a distance overlay graphic to help you judge the proximity to an object. The screen docks securely in the

supplied bracket, from which it draws it's power and video through a mini USB 2.0 port. For security purposes you can easily remove the screen from the bracket and pop it in your glove box so as not to tempt potential thieves. An easy to setup and affordable car and truck reversing camera solution

Specifications	
System specification	5" LCD
Connector	Mini USB 2.0
Dimensions	
LCD	127(L) x 82(W) x 15(D)mm
Bracket	133(H) x 65(Dia)mm





Cat. QM-3741 Otv 1+ \$199.00 Otv 2+

\$225.00

\$158.95



Wireless 2.4GHz DIGITAL Reversing Camera with 3.5" LCD Monitor

Ildeally suited to trucks, buses, and other large off road vehicles. This wireless reversing system consists of a sturdy 2.4GHz wireless reversing camera capable of night vision with an adjustable viewing angle. The 3.5" LCD monitor can be mounted inside the car with the supplied suction mounting bracket and will automatically pair with the wireless cam. A 640 x 480 image will instantly stream to the monitor giving a clear view of the vehicles rear. The unit can be expanded to accept up to 4 cameras which you can cycle through on the LCD or view quad cam mode for a complete vision of the vehicles

To keep setup simple the LCD has an internal battery that can be charged with the cigarette lighter socket or USB cable (both supplied) so you don't have to worry about cabling around the dash. A tough mounting bracket is fitted to the camera for simple attachment, but can be removed if you choose a different mounting method.



Monitor Dimensions: 130(L) x 87(W) x 26(D)mm Camera Dimensions (horizontal angle): 75(W) x 81(H) x

Spare 2.4GHz Wireless Reversing Camera Available Separately - QM-3807

Specification

93(W) x 62(H) x 24(D)mm

Qty 4+

33(L) x 20(Dia)mm

Power

Camera

Image sensor	
Туре	Colour CMOS 1/4"
Image processing	MJPEG
Transmitting range	100 metres
Lens	
Focal Length	2.5mm
Night view range	5m
Video Format	NTSC/PAL
Output Resolution	Adjustable between QVGA
'	(320 x 240) / VGA (640 x 480)
Frame Rate	20fps (QVGA) / 8 fps (VGA)
Image Processing	MJPEG
Power Requirement	12-24VDC
IP Rating	IP65
FHSS	Frequency Hopping Spread Spectrum
11133	technology to reduce interference

Accepts up to four cameras

7	Cat.	Qty 1+	Qty 2+	Qty 4+
Camera with Monitor	QM-3806	\$299.00	\$269.00	\$239.00
Spare Camera	QM-3807	\$159.00	\$142.95	\$126.95



Reversing Camera with Sensors and 3" LCD Monitor

A complete automotive reversing solution! This unit integrates 4 ultrasonic sensor as well as flush mount low light wide angle reversing camera. Information and images are displayed through the 3" LCD Monitor. Parking assist lines are overlayed and digital distance indication is displayed on the screen. Audible indication can be set on either voice or beep alert or both. Monitor displays time and date when not in reverse mode. A truly accurate and reliable reversing system that will save you time, money and stress of unfortunate reversing accidents

- 3" TFT LCD monitor with parking assist lines
- Flush mount or micro-tab camera available Shock, vibration and water resistant camera
- PAL or NTSC mode available • Accurate digital distance and clear rear view shown on the monitor
- Anti-false alert technology

•	Audible warning and	voice warning	(optional), vo	lume adjustable
	Self-test function	3		,
	A -1 C 1 1 1 1 1	1		

Cat.	Qty 1+	Qty 2+
LR-8870	\$199.00	\$178.95

Freecall order hotline: 1800 022 888





Auto Parking Assist & Event Recorders

PARKING ASSIST KITS

Wireless Digital Vehicle Parking Assist System

A simple and easy to install ultra-sonic reversing system. This 4 sensor reversing system utilises a wireless connectivity between the monitor and the sensors of up to 30 metres making it suitable for larger vehicle installations such as trucks, buses, motor homes, caravans, etc.

Distances from objects are accurately displayed on the 5 colour LCD display as well as voice and beep alerts.

- Complete rear protection
- Colour changing backlit LCD display with universal adjustment
- Wireless display with audible/voice & visual warning Self-testing function
- Detachable sensor with waterproof wire connector

- New anti-false alarm technology
 No interference with the car's electronics system
 Perfect performance in all weather conditions (-40°C +85°C)
- Heavy rainproof design
- Power: 12V
- Display Dimensions: 72(L) x 53(W) x 17(D)mm
- Sensor Dimensions: 23(L) x 21(Dia)mm

Specifications		
Voltage	12V ± 3V	_
Display range	2.5-0.3m	
Detection range	2.5-0.1m	,
Operating temperature	-40°C +85°C	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Beep volume	70-90dB	
Input	<4W	
_		



LR-8874 \$99.00 \$88.95 \$78.95	7	Cat.	Qty 1+	Qty 2+	Qty 4+
		LR-8874	\$99.00	\$88.95	\$78.95

Front and Rear Parking Assist Kit

Front and rear parking sensor technology is usually a safety feature found in more expensive European vehicles. This parking assist kit allows you to install such a luxury and avoid unexpected accidents. With 8 sensors and a blue LCD display unit, easily mounted on top of your front windshield. Never misjudge or hit the curb again with precise detection up to 0.01m and individual sensor distance display. A smart and safe device for families with children or owners of larger vehicles with dangerous blind spots. The control unit allows you to select between voice or audible alerts. It features anti-false alert technology and a

self-test function. Waterproof wire connectors and sensor are also designed to handle harsh weather conditions.

Complete front & rear protection with 8 sensors

Specifications	
Input voltage	9 - 16VDC
Beep volume	50 - 70dB
Detection range	
Front	0.10 - 0.99m,
FIUIL	0.10 - 0.69m (reversing)
Rear	0.10 - 2.59m
Display range	
Front	0.30 - 0.99m,
HOIIL	0.30 - 0.69m (reversing)
Rear	0.30 - 2.59m
Display dimensions	104(W) x 75(D) x 41(H)mm



7	Cat.	Qty 1+	Qty 2+	Qty 4+
	LR-8872	\$199.00	\$178.95	\$158.95

CAR EVENT RECORDERS

HD Car Event Recorder with LCD

Records the vision through the windscreen as you drive, which can be played back on the colour 2.5" colour LCD at any time. Use it to prove what happened in a car accident, record a scenic drive or replay a hot lap around the race track. Connect power using the provided cigarette lighter cable, attach to the windscreen using the suction mount and insert an SD memory card (available separately). Other features include HDMI output to playback on a large TV, JPG snapshot button, four infrared LEDs to improve night time recording, and Li-ion battery to extend the recording should the power be disconnected. Supplied with USB cable

to download data to a MAC or PC.

- 5MP HD Sensor Cycled Recording
- 160 degree wide angle lens
- Microphone
- Motion detection function
- Supports SDHC cards up to 32GB, SDXC 64GB and larger

Specifications	
Full HD	1080P (1440 x 1080)
HD	720P (1280 x 720) @ 30fps
WVGA	(848 x 480) @ 30fps
VGA	(640 x 480) @ 60fps
Video format	H.264/AVI
JPG	2592 x 1944 pixels
Main unit measures	100(L) x 60(W) x 23(D)mm

Qty 2+ OV-3840 \$133.95 \$118.95

Car Video Event Recorder and GPS

An event recorder is a device that records video for creating a record of accidents or driver and vehicle performance. It's automatically activated by an event that is triggered by the built-in 3-axis G sensor that responds to a sudden change in wheel speed. It starts recording to a MicroSD card and can also be triggered manually with the remote control if required. No installation - it simply mounts onto the windscreen like a GPS unit. Having a recording of events will protect your side of the story in the event of an accident or other disputed circumstance. Depending on the size of the micro SD card, you can capture several hours of video. Ideal for fleet operators, taxis, hire cars or the everyday person who spends a lot of time on the road.

Specifications

Video resolution

Memory card support

Lens Angle

Dimensions



- · Video output for external monitor
- USB and cigarette lighter power cables included
- IR remote included
- · Compatible with Windows XP, 7(32 bit)

7	Cat.	Qty 1+	Qty 2+	Qty 4+
	QV-3798	\$199.00	\$178.95	\$158.95

HD Car Event Recorder with LCD & GPS

Mounts to the car windscreen to record vision, audio, GPS coordinates and speed to an SD memory card (available separately), which can be played back later to prove what happened in a car accident. The camera cycle records until the G-sensor is triggered during excessive braking, acceleration or collision. You can also manually trigger the recording if you see an incident ahead. Use the 2.4" colour screen to help align the camera or to playback any recordings. Connect to a PC with Internet connection to see the car location on GoogleMaps during the playback. Other features include HDMI output to playback on a large TV, six infrared LEDs to improve night time recording, and Li-ion battery to extend the recording should the power be disconnected. Supplied with USB cable to download data to a MAC® or PC

- GPS
- G-sensor
- Cycled Recording
 95° wide angle lens
- Microphone
- · Supports SDHC cards up to 32GB

Specifications	
Sensor	5MP HD
HD	720P (1280 x 720) @ 30fps
Video format	H.264/AVI or MP4



MicroSD

640 x 480 @ 30 fps

Cat.	Qty 1+	Qty 2+	Qty 4+
QV-3793	\$199.00	\$178.95	\$158.95



In-Car LCD Monitors

IN-CAR LCD COLOUR MONITORS

3.5" LCD Car Dash-Mount Colour Monitors

Ideal reversing camera monitors that mount perfectly on your vehicles dashboard. You can also partner these LCD monitors with any video source for in-car

" FOI DARLE TET LCD MONITOR

This TFT LCD monitor folds down to a compact shell for dust protected storage and to keep the driving line of sight unobstructed.

- Power supply: 12VDC 8W
- · Crisp high resolution display
- TFT active matrix system
- Auto switching PAL (4.43MHz) and NTSC (3.58MHz)
- · Included: RCA cable & adhesive mounting sticker Cat. QM-3771



entertainment or GPS etc. With two composite input options, the rear vision view is automatically activated when your reversing gear is engaged. Both models are powered by 12VDC.

3.5" LCD MONITOR

Supplied with an adjustable swivel bracket and a clip on sun shade for optimal viewing.

- Power supply: 12VDC 10W PAL or NTSC
- Brightness, colour, contrast and tint controls
- Automatic mirror image selector
- for reversing camera Included: Mounting bracket & sunshade
- Dimensions: 100(W) x 87(H) x 25(D)mm

Cat.	QM	-3792



7	Cat.	Qty 1+	Qty 2+	Qty 4+
3.5" Foldable LCD	QM-3771	\$89.00	\$79.95	\$70.95
3.5" LCD Monitor	QM-3792	\$59.00	\$52.95	\$46.95

7" TFT LCD Widescreen Colour Monitor with IR Remote

It will deliver high resolution pictures in widescreen format and clear sound reproduction through its inbuilt speaker. It is extremely lightweight and is suitable for all sorts of mobile and fixed monitoring applications. Suitable for in-car and home entertainment, use it to watch DVD's, PS2®, XBOX®, etc. Two RCA composite video inputs and one audio input are provided for a multi source system.

This is truly a versatile monitor, it has low power consumption, wide viewing angle, and is NTSC and PAL compatible. It is equipped with On Screen Display enabling the user to easily control the colour, contrast, hue, brightness, and volume. A very slim and small infrared remote control is included. It has reverse image capability adjustable by pressing a button. Unit comes with an adjustable swivel bracket with double sided tape for adhesion on clean flat surfaces. A 4 pin mini din to 2 RCA and power cable is also supplied.

	·	
Specifications		
System	NTSC/PAL	
Power input	12VDC	
Power consumption	10W	
Video input	Composite video signal 1Vpp 75 Ohm	
Audio input	10dB (10k Ohm)	
Operating temperature	-10°C to + 40°C	
Screen size	7" (diagonal width)	
Display method	TFT Active matrix system	
Resolution	1140(h) x 234(v)	
Weight	800g	

*Works with most, but not default to modified widescreen in some cases







7	Cat.	Qty 1+	Qty 2+	Qty 4+
	QM-3752	\$119.00	\$106.95	\$94.95

7" Touch Screen LCD Monitor with USB

Touch screen capabilities enables use with a laptop/PC, games console and endless other VGA operating devices. Use it to control a computer or any other USB compatible device. The monitor can be mounted either on the bracket or flush mounted with cradle. Software and adaptor cables included.

Specifications	QM-3744
Case/bezel colour	Black/silver
Display type	16:9 ratio
Native resolution	800 x 480 @ 60 Hz , 1024 x 768 @ 75Hz
On screen display (OSD)	Remote OSD
Brightness	350cd/m2
Contrast ratio	Typically 400:1
Inputs	S-video,composite,VGA
Input video format	Analog RGB, NTSC/PAL/SECAM(auto)
Touch screen interface	Serial RS232 or USB
Operating system	MAC OSX / Windows 2000 SP4 / XP/Vista
Monitor dimensions	180x 123 x 30mm
Temperature Range	Operating 0-50°, Storage -20-80°
Operating voltage	12VDC
Dimensions	178(W) x 122(H) x 30(D)mm







~		Cat.	Qty I+	Qty 2+	Qty 4+
	7" Touch Screen Monitor	QM-3744	\$189.00	\$169.95	\$150.95
					_

9" In-Car LCD Colour Monitor

The perfect travelling companion, especially on long road trips. This 9" widescreen LCD delivers crisp high resolution images for your in-car viewing pleasure. Connect your source devices to entertain passengers with DVD movies or keep the kids amused with Xbox® or Playstation®. Featuring multisource inputs and reverse image function, it also doubles as a reversing camera monitor. Adjust the volume, colour, contrast, brightness and select your AV input with the front panel controls or simply use the slimline remote control. The tilting bracket gives you several in-car options, including dash and headrest mounting.

- Dual video and single audio input leads
 Front panel AV input and audio output
 Includes mounting bracket and remote control

Specifications	
System	NTSC/PAL
Screen size	9" widescreen - 4:3 & 16:9 switchable format
Resolution	800 x 480
Power input	12VDC
Power consumption	12W











Freecall order hotline: 1800 022 888



In-Car Entertainment

IN-CAR LCD COLOUR MONITORS (CONTINUED)

9" LCD Monitor with 4 Video Inputs

Versatile 9 inch video monitor with 4 composite video inputs. Inbuilt multi-signal controller can display 1, 2, or 4 inputs simultaneously. Ideal for vehicles with multiple cameras for reversing and manoeuvring. Swivel mounting bracket can be adjusted to any angle and can also be adapted for ceiling mounting. Signal selection is controlled by push buttons on the screen, IR remote control, or control wires in the main wiring loom.

Specifications	
Display Type	9 inch screen (16:9 format)
Resolution	680 x 480 display
Video	4 x composite inputs
Audio	1 x input
Operating Volatge	12-24VDC
Overall dimensions	234(W) x 157(H) x 24(D)mm
Display dimensions	196(W) x 111(H)

9" LCD Monitor

IDEAL FOR TRUCKS







IN-CAR ENTERTAINMENT HEADRESTS WITH BUILT IN 7" MONITORS

OM-3794

Sick of the kids screaming in the back seat, or your mates' incessant rantings about the previous weekend's drunken conquests? These are the cure-all solution that will ensure peace and quiet from the back seat. No need to chop up and hack to pieces your car's original headrests trying to fit a normal 7" monitor; with these nifty headrest replacements you simply take out the original headrests and fit these in their place. This means that when it comes time to sell your car, you can return it to factory equipment and take the

entertainment system with you. To ensure the security and subtlety of your in-car entertainment installation, a zip-up flap is fitted so that when not in use the monitors are not visible and they look like any normal headrest, making it suitable for the family car just as much as the "toy" car. The mounting posts are adjustable so they will fit almost any car, and all wiring runs down the mounting post to keep the installation

Headrest with built in 7" Monitor & DVD Player

If If you don't already have a DVD player or other AV source in the car, then install one of these to act as the "master" unit for the in-car video entertainment system. By simply flipping up the screen, the DVD player is revealed, providing hours of video entertainment with the ability to play not just DVDs, but also your video files such as Divx, MPEG4, etc, and even play videos on your USB stick or SD card. For the more adventurous, you can even connect up an Xbox360 or Playstation3 via the AV input. If all that doesn't cure backseat boredom, there is even an in-built games system (games CDs included) and two controllers supplied. The AV output allows you to connect to external monitors, such as our OM-3773, to ensure that no one goes without their own screen. A 3.5mm headphone socket is available on the front, or you can even use IR wireless headphones to ensure that everyone has their own set of headphones so that you don't have to listen to SpongeBob Squarepants on repeat for the entire trip. Supplied with IR remote control and two games controllers.

- Supports infrared earphones
- In-built games system (CDs supplied)

Specifications

Screen dimensions

Supports

Resolution

AV input & outputDark grey leather-look upholstery



neadlest differsions 290(W)	X 2 10(H) X 130(D)IIIIII			
7	Cat.	Qty 1+	Qty 2+	Qty 4+
1 Unit	OM-3776	\$199.00	\$178.95	\$158.95

Headrest with 7" TFT Colour Monitor

7inches

TSC/PAL 12VDC

If you already have a DVD player or other video source in the car, such as the QM-3776, you can set this up as a second or third monitor as part of system. This model features a 7" TFT screen, with two composite video inputs and IR remote control and is identical in appearance to the QM-3776 - making them an excellent "pair" for a complete in-car video entertainment system.

• 2 composite video inputs

Dark grey leather-look upholstery

3)				
Specifications				
Screen dimensions	7 inches			
Resolution	1440 x 234			
	(16:9/4:3 selectable)			
System	NTSC/PAL			
Power	12VDC			
Headrest dimensions	290(W) x 190(H) x 140(D)mm			



HEADPHONE AMPLIFIERS

3 Channel Headphone Amplifier

Consign your CRO to the dustbin of history where it belongs and go digital. Once they were so expensive only professionals could justify buying them, they're now within the reach of anyone in the market for a dual trace scope. The advantages of a DSO gives you capabilities that simply aren't possible with any analogue oscilloscope, including trace capture, PC interface, storage of data on portable media, on-screen menus, mathematical functions etc:

- Full 64k colour TFT display
- Compact size much smaller than an equivalent analogue CRO
- Storage memory
- USB interface Multiple trigger modes
- Digital filters
- Multi parameter auto measure function
- Split screen display
- On-screen menus
- Multiple language interface

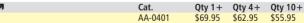
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-0400	\$29.95	\$26.90	\$23.70

4 Channel Headphone Amplifier

Allows up to four people to listen to the same music source on four separate headphones, without any audio loss you would experience using a passive splitter. Suitable for a range of applications including retail, education, office or for the home where kids can each have their own headset. Each output has its own volume control and the protective side rubber guards can be removed. Supplied with an AC power adaptor and a stereo 6.5mm to RCA adaptor.



- THD: <0.2%
- Headphone Impedance: 32-64 ohm Working Power: 12VDC, 200mA
- Input: 6.5mm stereo socket Output: 4 x 6.5mm stereo socket

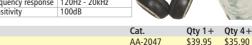


Wireless Stereo Headphones for QM-3752/66/76

Having the kids watching DVDs in the back of the car is all very nice, but you don't want to be blasted with endless episodes of Spongebob Squarepants or The Wiggles for hour after hour. Add a pair of wireless headphones and enjoy automotive bliss

Soft cushioned earpads for comfort, switchable between channel A and B

Specifications	
Driver diameter	27mm
Nominal impedance	32 ohms
Frequency response	120Hz - 20kHz
Sensitivity	100dB





Qty 10+



IN-CAR ENTERTAINMENT

In-Dash MP3 Player with Radio

With high capacity USB drives and SD cards being so cheap now, this is an excellent alternative to carrying around a glove box full of CDs - instead you can listen to your favourite MP3s directly from the USB/SD card slot. Featuring PLL AM/FM tuner with 18FM/12 AM presets and MP3/WMA playback you will never miss a beat with this in-dash MP3 player. Thanks to the lack of a CD drive, the mounting depth is quite shallow making it a breeze to install in tight space locations such as a glove box.

- MP3/WMA playback
 MP3 ID3 tag display
 4 x 20WRMS power output
 Rotary volume encoder
- Multi band EQ
- PLL tuner with 18FM/12AM presets
- 2 channels x 2V line-out





RESPUNSE





In-Dash Multimedia Player with USB & Bluetooth

A solid all-round performer, this in-car entertainment system plays various popular multimedia formats and connects with external media players and file storage devices in a number of ways. Featuring the latest in file sharing with Bluetooth, front panel SD card slot, USB port and aux-in; it supports MP3, JPEG and WMA files. It also has AM/FM radio with 18 x AM and 12 x FM programmable preset stations and plays DVDs, VCDs and CDs. This highly versatile head unit has further input/output options, including NTSC/PAL video out, subwoofer out, and a mic input to make it a fully functional handsfree car kit when paired with a Bluetooth-enabled mobile phone. Complete with flip-down and detachable panel with colour LCD and slimline remote control.

- Bluetooth file sharing and handsfree mobile phone capability
 Front USB port, SD/MMC card slot and aux-in
 PLL tuner with 18 x FM and 12 x AM presets

- DVD±R/RW, CD-R/RW playback



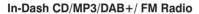
OM-3788











Digital radio is ideally suited to the automotive environment. AM is especially plagued by reception and interference problems and DAB+ does away with all this as the major metropolitan and national AM stations are now broadcasting on digital. In addition to DAB+, you also get FM and MP3 playback through just about any source you could think of - USB, SD or MMC card or CD. It also has a built-in 4 x 20WRMS amplifier, so all you'll need to add is speakers. The ideal replacement for that tired factory-fitted music machine.

\$199.00

- Fits standard DIN slot
- Flip-down detachable panel with colour LCD
 SD/MMC card slot
- Front panel USB and AUX CD/MP3/WMA playback
- CD-R/RW playback
- MP3 ID3 tag display: Title, Artist and Album MP3 track/file/character search
- 4 × 20W RMS output
- 4-band EQ (Classic, pop, rock, flat) 18FM/12AM presets
- 2 x line level outputs
- Dimensions: 188(W) x 58(H) x 205(D)mm
 Mounting depth: 180mm







RESPUNSE

NOT AVAILABLE IN NEW ZEALAND

7	Cat.	Qty 1+	Qty 2+	Qty 4+
	QM-3783	\$249.00	\$225.00	\$198.95



Touchscreen Car Multimedia Player

Comprehensive in-car connectivity - this impressive unit plays all the popular AV formats from just about any portable media or storage device. Plus it's Bluetooth-ready for handsfree communication when paired with a Bluetooth enabled mobile phone. Even with all its advanced technology, it's easy to operate this in-dash multimedia player. Its user-friendly touchscreen menu enables you to easily select and control several input play options including phase lock loop (PLL) AM/FM radio with preset channels, CD/DVD player, USB, SD memory card, options including priose lock (top) (TLZ) AWI MI Hadron With Jiesek Challines, CATOVO player, 0.58, 30 mileral reversing camera, iPod® and auxiliary line-in device. Plays your conventional CDs and DVDs as well as MP3s and MPEG4s and a host of other formats. Mounting hardware, Bluetooth bus and remote control included.

- Motorised 7" touchscreen LCD (480 x 234 pixels)
 22WRMS x 4 channels (45W max each)
- Front panel USB, SD & aux-in
- 1 x rear camera input, 1 x video output
 DVD/VCD/CD/MP3/WMA/JPEG/MPEG4 playback
- DVD±R/RW, CD±R/RW playback
 PAL/NTSC/SECAM compatible
- PLL tuner 12AM/18FM presets with RDS
- ISO cable connector and telemute









7	Cat.	Qty 1+	Qty 2+	Qty 4+
	QM-3789	\$369.00	\$335.00	\$299.00



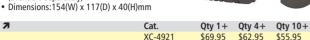
FM Transmitters & Bluetooth Car Kits

SET TOP BOX FOR CARS

12VDC HD Digital Set Top Box

Great for use on the road, this high definition set top box will pickup all the digital channels on offer in your locale. You can also plug in a USB drive and record TV in MPEG2 format to watch at a later date

- · Output: HDMI, Composite, RF
- USB port for recording and playbackCigarette lighter cable included
- Suitable antenna LT-3143 (available separately)



FM TRANSMITTERS

12/24V MP3 FM Modulator with Remote

Unbelievable bargain price! Simply plug in to your cigarette lighter socket, this unit will play MP3 tracks directly through your car stereo through the FM band. Music can be stored on an SD/MMC card, USB memory stick or an external media player (iPod®s, MP3 players) can be plugged in via the auxiliary input. Can be powered from a 12V or 24V source, it has a backlit LCD that can be rotated for optimum viewing angle.



12 - 24VDC operation

Dimensions: 130(L) x 40(W) x 25(H)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+	
	ΛR-3120	\$1// 05	\$13.35	\$11.70	

FM Transmitter with Detachable MP3 Player - 2GB

This handy device allows you to detach and use the MP3 player as a conventional MP3 player and also enables you to detail and use time MP3 player as a conventional MP3 player and also enables you to dock it into the cigarette lighter cradle so you can and listen to your music through your car radio. Features a built-in MP3/WMA decoding chip that enables you to play from the stored TF card and built-in memory. The 30mm LCD screen displays everything from the name of your song to the transmitting frequency. Comes with a USB charging cable and earphones.

- Supports MP3, WMA filesTotal 206 channels

- Separate power switchBuilt-in MP3 decode and stereo transmitting chip
- Built-in EQ sound modes (7 types)
 Built-in memory 2GB
 Built-in 240mA lithium battery

- Total length (including MP3 player: 230(L)mm approx

Specifications	
Operation voltage	9V-26V
Power consumption	1W
Working temperature	0-50°
S/N	>60dB
Distortion	<0.1%
Frequency response	87.5-108MHz



Remote Control Car MP3 Player





An MP3 player that plugs directly into your cigarette lighter socket. This unit will transmit audio playback from an SD card, USB Flash disk or any external audio source via the Auxiliary input to any frequency in the FM band of your car stereo. Controls are performed through the front panel, IR remote or the steering wheel mounted remote.

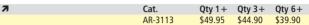
- 2.5 3.5mm stereo cable included
- Supports SD/MMC or USB
- Supported audio formats: MP3, WMA
- Dimensions: 70(H) x 50(W) x 22(D)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	AR-1865	\$34.95	\$32.90	\$27.90

MP3/USB FM Modulator for iPhone® & iPod®

Play your iPhone® or iPod® through the FM radio in your car. Plug into the cigarette lighter socket, then tune to the FM band to play and charge your iPod®, iPhone® or use the 3.5mm stereo cable to play any other MP3 player or auxiliary audio source. It also has a USB socket, so you can also play tunes from a flash drive. The strong clamp is adjustable to take devices from 40 - 80mm wide.

Specifications	
Range	5m
Frequency range	88 - 107MHz
Dimensions	110(H) x 65(W) x 40(D)mm



BLUETOOTH® CAR KITS

Bluetooth® Hands Free Car Kit

Avoid the risk involved with using your mobile handset whilst driving by using this simple Bluetooth hands free car kit. Easily installed by plugging in and pairing with your mobile phone, the unit allows you to accept and reject calls with the push of a button. A built-in speaker and microphone eliminates the need for any additional parts, and with power coming directly from a 12 or 24 volt lighter socket there is no additional wiring. Echo cancellation ensures a clear call and the speaker volume is adjustable using a dial on top of the unit.





\$29.95



Note: iPod®

not included



\$26.90

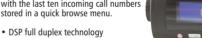
Bluetooth® Hands-free Car Kit with LCD

Safely dial or answer phone calls hands-free whilst driving with this user friendly visor mounted Bluetooth® car kit. The large LCD screen displays the incoming callers name or number for quick glance caller identification. Features voice operated dialling so you can make calls hands-free using the built-in highly sensitive microphone, high powered loudspeaker, and dual standby allowing two phones to

Cat.

AR-3121

connect simultaneously, which is very handy when you own two phones or share the car with another person. The built-in phone book stores up to 800 telephone numbers with the last ten incoming call numbers



- Noise, echo and wind suppression
 Built-in rechargeable Li-ion battery for 360 hours standby
- Supports English, French, German, Italian, Spanish and Chinese
 USB cable and 12V car charger included

Specifications	
Bluetooth version	V2.1+EDR
Bluetooth range of operation	0-10m
Hands-free talk range	0.5-2m
Input charging voltage	DC 5V (300mA)
Built-in Li-ion battery capacity	800mAh
Weight	305g
Dimensions	185(L) x 136(W) x 65(H)mm





Cat. Qty 6+ AR-3122 \$53.95

DISCOUNT TRADE CARD

If you regularly purchase electrical or electronic goods to be used for business purposes you may qualify for a **Jaycar Electronics Trade Card** which entitles you to substantial discounts on most Jaycar products. Discounts range from 5% to 30% depending on the type and quantity of product purchased. **Excludes Kits & Books.**

ABN will be required - see our website or Store Manager for further details.



BRACKETS & CHARGERS FOR IPHONE®, IPAD®, IPOD®

Bicycle Bracket Mount for iPhone® 3/4

Easily mount your iPhone® to the handlebars of your bicycle so you can take calls, navigate with your GPS app, listen to your favorite music, etc. Position to the optimum viewing angle for riding using the ball and socket joint. A locking mechanism safely and securely locks either the iPhone® 3 or iPhone® 4 cradle into the bracket.

Includes a case/cradle for both iPhone® 3 and iPhone® 4

• Dimensions: 116(L) x 60(W) x 84(D)mm



Note: iPhone® not included.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	HS-9016	\$29.95	\$26.90	\$23.70

12VDC Charger Cradle for iPhone® 3/4

Holds and charges your iPhone® as you drive. The holder plugs directly into the car cigarette lighter and has charging cradles to suit both iPhone® generations and a universal holder for other types of mobile phones. The iPhone® cradle doubles as a protector case whilst out and about and docks securely into the holder bracket when you get back in the car.

• Includes a case/cradle for both iPhone® 3 and iPhone® 4

Note: iPhone® not included

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	HS-9012	\$24.95	\$22.35	\$19.70

CASSETTE ADAPTORS

CD/Cassette Adaptor

Play your portable CD or Mini Disc player through your car stereo cassette system.

. No power or batteries required.

Supplied with 1.1 metre lead & 3.5mm stereo plug.

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	AR-1760	\$16.95	\$14.95	\$13.35

MP3 Player/Cassette Adaptor

If your car only has a cassette deck and your budget doesn't extend to a new CD player, you can still play your favourite MP3 tracks through the car stereo. You just plug in your media card with your music files, load it into the cassette deck and control the music with the remote unit - it provides track selection, volume control and a choice of five EQ settings. You can also plug in your headphones and use it as a stand-alone MP3 player or connect to your PC using the included USB cable.

- Excellent sound qualityBuilt-in 3.7V 250mAh battery
- · Supports SD, mini SD and MMC cards
- Remote cable 450mm long
 USB cable and cigarette lighter adaptor

 8 hours playing time from one charge 		7
7	Cat.	Qty 1+
	AR-1764	\$19.95

Universal Suction Mount Bracket for Mobiles & iPhone® 3/4

This handy bracket mounts an iPhone® or other mobile phone on the windscreen or dashboard of the car where it's easily accessible. The strong 70mm diameter suction mount locks it in place, and the ball and socket joint allows you to position the bracket for the optimum viewing angle. Includes universal mobile phone and iPhone® 3/4 brackets.

Dimensions: 115(L) x 60(W) x 11(D)mm

Caution: The use of windscreen-mounted devices is illegal in some states, so check with your local traffic authority before using this device. Always ensure it is mounted so that it does not obstruct your view or cause a distraction

Cat. Qty 1+ Qty 3+ Qty 6+ \$26.90 \$23.70

Cup Holder Power Extender with Phone Cradle and Dual USB Sockets

This clever charging system is designed to fit in a car cup holder to dock an iPhone® or iPod® in place preventing it from moving around while driving. It also neatly stores the charging cable away in the base to prevent clutter in the car's interior. Two cigarette lighter sockets are provided as well as a USB output for use with other electronic devices. Also has an LED indicator to state the level of your battery.

- 2 x 12VDC cigarette lighter sockets
- 2 x USB outputs
 iPhone®/iPod® holder
- Twist open bottom half
- Dimension: 100(H) x 70(Dia. base) x 92(Dia. top)mm

7	Cat.	Qty 1+	Qty 10+	Qty 50+
	PS-2122	\$24.95	\$22.35	\$19.70

Car Headrest Mounting Brackets for iPad® 1/2

No longer is there the need to purchase a separate incar entertainment system for the kids to watch movies and play games whilst on the road. Simply mount this bracket to the metal bars on the headrest and place the iPad® into the cradle. The cradle also doubles as a protector case while out and about, then securely docks onto the bracket (by sliding the case onto the mount) when you get back in the car. This is a really handy solution for keeping kids and teenagers amused on long journeys.

Includes a case and cradle

Dimensions: 244(L) x 188(W) x 15(D)mm

Two models available: Bracket for iPad®1 HS-9010 Bracket for iPad®2 HS-9011

Note: iPad® not included



	,				
	Cat.	Qty 1+	Qty 3+	Qty 6+	
Bracket for iPad®1	HS-9010	\$24.95	\$22.35	\$19.70	
Bracket for iPad®2	HS-9011	\$24.95	\$22.35	\$19.70	

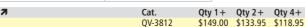
BLACK BOX

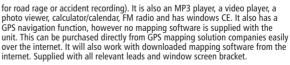
Amazing "Black Box" Car Multifunction Unit

A great multi-functional device that will replace most of your electronic gadgets in your vehicle. This 5" touch screen LCD fits onto a windscreen adaptor in a very similar fashion to a GPS mapping device. It has a video camera on its reverse side so that you can record what you see through your windscreen. (Very handy

- 5.0 inch TFT panel.
- Resolution: 800RGB(H)x480(V)
- Touch screen operation
- 3.5mm Stereo Audio output · Built-in GPS antenna
- Supports MicroSD/MMC card (From 1GB up to 8GB)
- MINI USB port.Built-in Lithium battery

Specifications	
Video file format	ASF, AVI, WMV, 3GP, MP4, FLV
Audio file format	MP3, WMA
Image file format	BMP, JPG, PNG
E-book reader software	TXT
Dimensions	134(W) x 83(H) x 13(D)mm







Note: iPhone®

not included







LIDE

Qty 10+

Qty 5+

\$17.70

In-Car Phone & GPS Chargers

GPS BRACKET

Gooseneck Windscreen or Cigarette Lighter GPS Mount

Mounting your GPS/PDA/Mobile phone where it can obstruct your vision is very dangerous. With this handy dooberlacky, you can either plug into your cigarette lighter socket or mount it on the windscreen glass. The gooseneck allows it to be mounted where it won't obstruct your vision. The bracket adjusts to fit your device and can be rotated through 180° to accommodate wider devices, such as larger GPS units. The cigarette lighter mount has a piggyback socket so you can use the outlet to power your device.

• Base diameter: 67mm Gooseneck: 180mm long

Note: Mobile phone not included

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	HS-9002	\$24.95	\$22.35	\$19.70

GPS Sunshades

An LCD on a GPS can become very hard to see in bright sunlight. Solve the problem easily by giving your GPS a sunhat. Simply clip to the top of your GPS unit. Different types to fit popular in-car GPS models: Garmin Nuvi, TomTom Go, Magellan Maestro, Navman etc.

LINIVERSAL GPS SUNSHADE 3.5" GPS SUNSHADE FOR TOMTOM 4.3" GPS SUNSHADE FOR GARMIN 4.3"

Cat HS-9005 Cat HS-9006 Cat HS-9007





Note: GPS not included

LRHZ 3.5" Universal GPS Sunshade HS-9005 4.3" Sunshade for TomTom HS-9006 4.3" Sunshade for Garmin

GPS & PHONE CHARGERS

Universal Mobile Phone Charger

Charges every common mobile phone, iPhone® and the latest Nokia models as well as some PDA and MP3 players

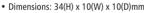


- Suitable for new model iPods®, iPod Touch® 3G
- Cable Length: 1m • Dimensions: 66(H) x 40(W) x 37(D)mm

7	Cat.	Qty 1+	Qty 5+	Qty 10-
	MR-3656	\$20.05	\$26.00	\$23.70

Nokia Plug Adaptor

Nokia phones have a smaller DC charging plug. This makes all these spare chargers you have lying around obsolete. Not now! This adaptor accepts the larger DC plug and converts it to the smaller one, enabling you to have a spare charger at work etc!



7	Cat.	Qty 1+	Qty 10+	Qty 50+
	PΔ-3710	\$5.95	\$5.25	\$4.75

USB Car Chargers

For anyone with a mobile phone or other device that charges from a USB socket, these are the perfect solution for recharging in the car. Simply plug into your car's cigarette lighter socket, and you have a readily available USB charging source. Two rodelette lighter socket, and you have a readily available USB chalging source. It wo models are available - one has just a single USB socket with 1.0A available making it suitable for most mobile phones, iPods® and iPhones®; and the other has two USB sockets with a total of 3.1A available (2.1A + 1.0A) making it suitable for charging an iPad® and mobile phone/iPod®/iPhone® at the

same time.

1.0A USB CAR ADAPTOR • Input: 10-18VDC

- Output: 5VDC, 1.0A
- Dimensions: 24(Dia) x 52(L)mm Cat MP-3662

3.1A DUAL USB CAR ADAPTOR

- Input: 10-18VDC
- Output voltage: 5VDC, 2.1A + 1.0A (3.1A total)
 Dimensions: 26(Dia) x 60(L)mm

Cat MP-3664

			_		
7		Cat.	Qty 1+	Qty 5+	Qty 10+
	1.0A USB Adaptor	MP-3662	\$9.95	\$8.75	\$7.75
	3.1A USB Adaptor	MP-3664	\$19.95	\$17.70	\$15.70

Universal GPS Charger with Dual USB Output

This very handy universal GPS charger not only works as a replacement for an original GPS charger, but having two USB outputs and higher output power offers a bonus allowing you to charge both your GPS and your mobile phone (or other USB device)

With 2.1A available from each USB port, it has enough power for even the latest and greatest big screen GPS models, whilst still having enough power left over to charge a second USB device. Supplied with 1.2m USB charging lead and 6 replaceable connectors to suit most GPS models.

- Suitable for: TomTom, TomTom XL, Navman, Garmin, Magellan, Navigon, Falk, Mio, etc Input: 12-24VDC
- Output: 5VDC, 2.1A max per USB port (4.2A total)

Dimensions: 100(L) x 42(W) x 25(H)mm

71	Cat.	Qty 1+	Qty 5+	Qty 10+
	MP-3676	\$29.95	\$26.90	\$23.70

Car & Mains Mobile Phone Charger Pack

The handy universal solution to charging your mobile phone in the car or home. Included is a cigarette lighter USB car charger and a mains USB charger each capable of delivering 5VDC up to 1A via a USB output. The pack also includes a universal USB charging lead with 4 interchangeable tips to match common mobile phones. You can also use either charger with any existing USB charging lead you may have.



- iPhone®/iPod®
- Nokia 2mm

Dimensions: Car Charger: 100(L) x 36(W) x 31(H)mm Mains Charger: 69(H) x 41(W) x 39(D)mm

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	MB-3655	\$29.95	\$26.90	\$23.70

Universal USB Mobile Phone Car Charger

The handy universal solution to charging your mobile phone in the car. Included is a rigarette lighter USB car charger capable of delivering SVDC up to 1A via the USB output, as well as a universal USB charging lead with 9 interchangeable tips to match all the most common mobile phones. You can also use it with any existing USB

charging lead you may have.

Input: 12 - 24VDC Output: 5VDC, 1.0A Cable length: 1 metre Dimensions: 100(H) x 35(W) x 30(D)mm

Plugs included:

• USB Mini 5pin USB Micro B

- iPhone®/iPod® Sony Ericsson
- Motorola
- Samsung
- Nokia 2 & 4mm

7	Cat.
	MP-3

USB Car Chargers for



SINGLE OUTLET CHARGER Cat MB-3657

iPad®/iPhone®/iPod®

DOUBLE OUTLET CHARGER Cat MB-3659 7 Single Outlet Charger MB-3657 \$22.35 \$19.70 **Double Outlet Charger** MB-3659 \$29.95 \$26.90 \$23.70



Low cost doesn't mean low quality. Coax speakers are an ideal replacement for the standard equipment stereo speakers you get in the average car. All are equipped with titanium coated fibre woofers and silk dome tweeters for smooth high frequency response.

Response 4" Coax 2 Way Car Speakers

Specifications	
Power handling	15WRMS
Nominal impedance	4 ohms
Frequency response	90Hz - 18kHz
Sensitivity	83dB SPL @1W, 1m
Qms	3.2
Qes	1.85
Qts	1.18
Vas	1.45 litres
Fo	122Hz





7	Α	В	
	102	115	

	WARRANTU
Cat.	

Qty 4+ Qty 10+

RESPUNSE

Response 5" Coax 2 Way Car Speakers

Specifications	
Power handling	17WRMS
Nominal impedance	4 ohms
Frequency response	70Hz - 18kHz
Sensitivity	85dB SPL @1W, 1m
Qms	4.28
Qes	1.88
Qts	1.31
Vas	3.31 litres
Fo	106Hz





7	Α	В	C	D	Cat.
	130	138	115	44	CS-2

Qty 10+ Qty 4+ \$23.70

Qty 1+

\$29.95



Response 6" Coax 2 Way Car Speakers

Specifications	
Power handling	22WRMS
Nominal impedance	4 ohms
Frequency response	60Hz - 20kHz
Sensitivity	88dB SPL @1W, 1m
Qms	4.88
Qes	1.5
Qts	1.15
Vas	10.18 litres
Fo	75Hz





Response 6 x 9" Coax 2 Way Car Speakers			
Specifications			
Power handling	27WRMS		
Nominal impedance	4 ohms		
Frequency response	55Hz - 18kHz		
Sensitivity	86dB SPL @1W, 1m		
Qms	4.76		
Qes	1.57		
Qts	1.18		
Vas	17.3 litres		
Fs	61Hz		





see pages 203

	236 x 165	205
	DEAKED	OADLE.
S	PEAKER	CABLE

166

For full range of Speaker Cable

Extra Heavy Duty Figure 8 - 30m

Cable is 2 x 79/0.2mm.



Cat.

Cat.

Monitor OFC - 20m Same as WB-1735, but supplied on a convenient 20m plastic reel.

Cross Section

Cat.	1+ Rolls	4+ Rolls	10+ Rolls
WB-1736	\$64.95	\$55.50	\$51.95

RESPUNSE



Cross Section

ROLL LENGTH 30 METRES

www.jaycar.com.au

1+ Rolls 4+ Rolls 10+ Rolls WB-1713 \$64.95 \$58.50 \$52.50

AUTO & OUTDOORS

Car Speakers

RESPONSE PRECISION KEVLAR COAXIAL CAR SPEAKERS





All models are now paired with Soft Dome Tweeters!

Back by popular demand! These are our ever popular Response Precision Kevlar Coaxial Speakers that has won many awards and magazine recommendations in the past, only with a new look. The Kevlar speaker cone is now supplied in Black but it still retain its outstanding performance that we are all accustomed to. The tweeters are still the original soft dome tweeter that provides

clean, crisp sounds and maintains a natural and smooth balanced sound; nestled in an adjustable bracket for optimal sound trajectory. Virtually unchanged in design and performance, we have put our efforts in changing one thing; the price. Now at more competitive price points; these coaxial speakers are great value for money topped with award winning performance.

4" Kevlar/ Dome Tweeter 2 Way Coaxial Speakers

Specifications			
Power handling			40WRMS
		oedance	4 ohms
	uency re	esponse	90Hz - 20kHz
Sen	sitivity		88.5dB SPL @ 2.83V, 1m
Qms			10.25
Qes			1.12
Qts			1.01
Vas			1.7 litres
Fs			115Hz
7	۸	В	•
^	А	В	C
	102	00	17



Cat.

CS-2400





5" Kevlar/ Dome Tweeter 2 Way Coaxial Speakers

Specifications:			
	ver handl		50WRMS
Nor	ninal imp	edance	4 ohms
Frec	quency re	sponse	80Hz-20kHz
Sen	sitivity		89dB SPL @ 1W, 1m
Re			3.3 ohms
Qm:	Qms		6.91
Qes			0.76
Qts			0.68
Vas			5.27 litres
Fs			87.6Hz
7	Α	В	C(mm)
~,		_	C(IIIII)
	130	110	64







7	Α	В	C(mm)	
	130	118	64	

Cat.

Qty 1+

Qty 1+

Qty 4+



6.5" Kevlar/ Dome Tweeter 2 Way Coaxial Speakers

Cma	aifi anti a		
Specifications:			
	er handl		75WRMS
Nor	ninal imp	edance	4 ohms
Frec	uency re	sponse	65Hz-20kHz
Sen	sitivity		89dB SPL @ 1W, 1m
Re			3.3 ohms
Qms			5.90
Qes			1.23
Qts			1.02
Vas			5.94 litres
Fs			98Hz
7	Α	В	C(mm)
	166	1/10	70



Cat.

Cat.





6 x 9" Kevlar/ Dome Tweeter 2 Way Coaxial Speakers

7 A D	C(mm)
Fs	53.2Hz
Vas	31.1 litres
Qts	0.71
Qes	0.79
Qms	7.99
Re	3.4 ohms
Sensitivity	90dB SPL @ 1W, 1m
Frequency response	55Hz-20kHz
Nominal impedance	4 ohms
Power handling	75WRMS
Specifications:	







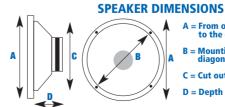
A B C(mm) 235x163 220x150 90

Qty 1+ \$119.00

Qty 10+ Qty 4+

NOTES ABOUT SPEAKER SPECIFICATIONS

- In an effort to assist customers choices between speakers, our entire speaker range have been assessed and measured under the same test conditions. Therefore making the resulting data in this catalogue comparable.
- All drivers have been measured for Thiele and Small parameters after a period of "Breaking In" for a minimum of 15 hours, and not tested straight off the shelf. This ensures a more long term and realistic result.



= From one side to the other

- Mounting holes
- C = Cut out in millimetres
- D = Depth

The automotive cabin is a harsh and difficult audio environment. With Vifa's patented Hearing Optimised Driving (HOD) technology; this speaker system will drastically improve the sound reproduction in your car audio system. Experience high fidelity car audio as it should be.

Not only are these subwoofers great for SPL applications, they also offer oustanding performance producing genuine high fidelity sound quality. With dual voice coils, high power handling and die-cast aluminium chassis, they don't just sound brilliant, but will also deliver SPL when you want it.



10" SUBWOOFER







12" SUBWOOFER





Specifications	CS-2351
Power handling	200WRMS
Nominal impedance	2 x 4 ohms
Frequency response	30Hz - 1kHz
Sensitivity	86.6dB SPL @ 1W, 1m
Qms	6.13
Qes	0.83
Qts	0.73
Vas	42.8 litres
Fs	38.6Hz

Specifications	CS-2353
Power handling	250WRMS
Nominal impedance	2 x 4 ohms
Frequency response	25Hz - 1kHz
Sensitivity	87.2dB SPL @ 1W, 1m
Qms	5.65
Qes	0.89
Qts	0.77
Vas	61.7 litres
Fs	36.5Hz

7	Α	В	C	D(mm)	Cat.	Qty 1+
	260	245	230	150	CS-2351	\$149.00
	315	293	270	164	CS-2353	\$179.00

SUBWOOFER ENCLOSURES

Twin Port Subwoofer Enclosures

Dual ported subwoofer enclosures with black carpet covering. Designed for optimal performance with the Vifa 10" and 12" subwoofers. All you need to do is to add the driver of your choice.

Note: Vifa driver not included.

10" SUBWOOFER ENCLOSURE

- Volume: 40.6 litres
- 480(W) x 360(H) x 280(D)mm Cat CS-2526





ENCLOSURE

Volume: 48.6 litres • 520(W) x 385(H) x 290(D)mm Cat CS-2527





7		Cat.	Qty 1-
	10" Subwoofer Enclosure	CS-2526	\$19.95
	12" Subwoofer Enclosure	CS-2527	\$24.95

CAR AUDIO ACCESSORIES

1 Farad Capacitor

High farad capacitors act as surge current reservoirs for your amplifiers and other electrical equipment. When amplifiers are subject to transient peaks and spikes, they often need to draw a significant amount of current to cope. When this happens, the supply voltage can drop by a few volts. This voltage drop can cause distortion and cause the output to clip which can damage your valuable speakers. Integrate these capacitors into your audio system to avoid this likely

- · Gold plated terminals
- Mounting brackets and hardware included
- Digital voltage display
 Dimensions: 260(H) x 75(Dia)mm





Car Panel Removing Tools Anyone who's installed a pair of speakers

or a head unit knows what a pain it is getting door panels and centre consoles off without scratching them. Use the right tool for the job - this set of pry bars will remove all the panels and even those upholstery clips. They're made of nylon/fibreglass composite and are extremely tough so they're guaranteed for 25 years. Ideal for DIY and pro installers.

The set contains:

210 x 20mm fork/lever

210 x 30mm hook/fork 175 x 20mm flat lever/hook lever

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-2338	\$24.95	\$22.35	\$19.70

Car Active Subwoofers

ACTIVE SUBWOOFERS

8" Under Seat Active Subwoofer

Add some bottom end to your car audio, even if you don't have room for a sub. MOSFET output stage for low distortion and noise. The compact size means it will fit under a seat and is robust enough to take some knocks. Ideal for utes, convertibles and trucks.

Specifications	
Power output	250WRMS
Frequency response	60 - 480Hz
S/N ratio	70dB
THD	0.06%
Input sensitivity Line level	200mV
Speaker level	800mV
Low pass filter	40 - 280Hz @ 12dB/octave
Variable gain	0 - 18dB @ 50Hz
Phase shift	-180 - 180
Dimensions	360(L) x 250(W) x 80(H)mm



Economy Active 12" Subwoofer

Unbelievable value! This 12" Subwoofer in a sealed enclosure has a built-in amplifier to match. Despite its economical price the unit produces a whopping 85WRMS of astounding bass. Equipped with line level and high level inputs, it also has built-in fuse protection and wired remote level control. True bang for your buck, we are confident you will not find another boombox with all these features and performance for the asking price.

Specifications	
Bass boost	12dB
Gain	18dB
Power output	85WRMS (150WRMS Max)
Dimensions	425(W) x 355(H) x 360(D)mm







7	Cat.	Qty 1+	Qty 4+	Qty 10+
	CS-2269	\$99.00	\$88.95	\$78.95

CAR AUDIO LEADS & ATTENUATOR

Twisted Pair RCA Stereo Audio Cables

An automotive cabin can induce a lot of RF and electromagnetic interference into your audio system through the RCA leads. With the use of our Response flexible double shielded twisted pair RCA cables, unwanted noise will be drastically reduced providing you with crystal clear and crisp signals.

- Tinned OFC
- Chemical and moisture resistant insulation
- Split center pin connectors
- Transparent jacket design
- Platinum-plated ends





7	Cat.	Qty 1+	Qty 4+	Qty 10+
0.3 metre	WA-1079	\$14.95	\$13.35	\$11.70
0.5 metre	WA-1071	\$14.95	\$13.35	\$11.70
2.5 metre	WA-1075	\$24.95	\$22.35	\$19.70
5.0 metre	WA-1077	\$29.95	\$26.90	\$23.70

Line Level Control (Attenuator)

This unit when fitted in a signal line allows you to adjust downwards excessive signal levels. You may have, for example a source from a CD/MP3 player and a tuner. Often one source is too loud (at line level) to the other.

- Stereo
- RCA line sockets in/out
- Measures 60(L) x 55(W) x 37(H)mm

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-3078	\$9.95	\$8.75	\$7.75

CAR NOISE FILTERS

Car noise filters or hot line filters are used to reduce noise and interference entering your car stereo through the power lead. The car alternator is one of the most common sources of problems, and these essential devices can help to reduce this.

10A DC Noise Filter (Improved)

This unit replaces models that have not changed for over 15 years. The filter itself arrests any noise on the DC power supply to car stereos, CBs etc better than ever. Most importantly it enables the installer to mount the unit without drilling mounting holes. You can secure this unit with either short or long cable ties. It will also "saddle" on a wiring loom if necessary Has 10A rated + & - DC leads and separate earth lead which should be terminated to chassis.



• Measures 90(L) x 60(W) x 33(H)mm

7	Cat.	Qty 1+	Qty 4+	Qty 10+
10A	AA-3074	\$14.95	\$13.35	\$11.70

Car Radio Suppressor

Traditional condenser type.



Cat. Qty 1+ Qty 4+ Qty 10+ AA-3060 \$3.95 \$3.45 \$3.15

10

DID YOU KNOW...

Gottlieb Daimler (1834-1900)

Daimler created the first combustion engine in 1886. Four years later Daimler and Wilhelm Maybach created the first four-stroke four-wheeled automobile.

Car Amplifiers

CAR AMPLIFIERS

With improved heat sinks and upgraded low-profile chassis design, each model delivers surprising grunt and performance in a sleek and compact package that fits neatly under your car seat. All include gold plated power and speaker terminals and variable low pass filters. Plus our class AB amps come with variable high pass filters and pass through RCAs; while our class D subwoofer amps feature variable subsonic filter, phase shift and master/slave operation.

All backed by a 12 month warranty - you won't find another range of car amps on the market with better watts-per-dollar return and stacked with these features as standard.

Precision Response 2 x 80WRMS Class AB Amplifier

An affordable 2-channel class AB amplifier. Both channels offer fully variable high and low pass filters, bass boost and pass through RCA pre-outs allowing you to link to additional amplifiers without the additional cost of RCA splitters.

• This is a great value first upgrade amplifier.

Specifications	
Power/channel @ 4 Ohm 14.4V	80WRMS x 2
Power/channel @ 2 Ohm 14.4V	125WRMS x 2
Power/channel @ 4 Ohm 14.4V bridged	255WRMS x 1
Signal/noise ratio	>90dB
Input sensitivity	150mV to 6V
Low pass filter	50 - 500Hz @ 12dB/octave
High pass filter	50 - 500Hz @ 12dB/octave
Bass boost	0 - 18dB @ 45Hz
Pass thru RCA	Yes
Dimensions	266(L) x 235(W) x 58(D)mm



Qty 1+ Qty 2+ Qty 5+ \$119.00 \$106.95 \$94.95



PRECISION

Precision Response 4 x 50WRMS Class AB Amplifier

AA-0450

A compact and very affordable 4-channel class AB amplifier. Both pairs of channels offer fully variable high and low pass filters, and pass through RCA pre-outs allowing you to link to additional amplifiers without the additional cost of RCA splitters.

 A great value amplifier that would be ideally matched with our new Kevlar coaxials and VIFA subwoofer range.

Specifications	
Power/channel @ 4 Ohm 14.4V	50WRMS x 4
Power/channel @ 2 Ohm 14.4V	80WRMS x 4
Power/channel @ 4 Ohm 14.4V bridged	160WRMS x 2
Signal/noise ratio	>90dB
Input sensitivity	150mV to 6V
Low pass filter	50 - 500Hz @ 12dB/octave
High pass filter	50 - 500Hz @ 12dB/octave
Pass thru RCA	Yes
Dimensions	316(L) x 235(W) x 58(D)mm
_	. .

RESPONSE

 Qty 1+
 Qty 2+
 Qty 5+

 \$149.00
 \$133.95
 \$118.95

Precision Response 2 x 150WRMS Class AB Amplifier

Even more power output with a massive 500WRMS x 1 when bridged into a 40hm load making this ideal for powering two of the Vifa dual 40hm subwoofers in series/parallel wiring. Variable bass EQ of up to 18dB is included, while the fully variable high and low pass filters make this amp equally useful for powering subwoofers or full range speaker systems.

AA-0451

• At this price, this is easily one of the best value 2-channel class AB amplifiers on the market today.

Specifications	
Power/channel @ 4 Ohm 14.4V	150WRMS x 2
Power/channel @ 2 Ohm 14.4V	240WRMS x 2
Power/channel @ 4 Ohm 14.4V bridged	480WRMS x 1
Signal/noise ratio	>90dB
Input sensitivity	150mV to 6V
Low pass filter	50 - 500Hz @ 12dB/octave
High pass filter	50 - 500Hz @ 12dB/octave
Bass boost	0 - 18dB @ 45Hz
Pass thru RCA	Yes
Dimensions	376(L) x 235(W) x 58(D)mm
7	Cat

RESPONSE

Qty 1+ Qty 2+ Qty 5+ \$169.00 \$151.95 \$134.95



Response Precision 4 x 100WRMS Class AB Amplifier

A whole lot of sophisticated grunt, this ultra-powerful 4-channel amplifier delivers over 100WRMS power per channel or 340WRMS in bridged mode at 40hm. An ideal one amplifier system for powering both full range speakers and a subwoofer. There's also fully variable high and low pass filters between 50Hz and 500Hz, with pass thru RCA outputs to link this amp to an additional 2 x 150WRMS amp AA-0452 for driving your subwoofers.

AA-0452

Specifications	
Power/channel @ 4 Ohm 14.4V	110WRMS x 4
Power/channel @ 2 Ohm 14.4V	175WRMS x 4
Power/channel @ 4 Ohm 14.4V bridged	350WRMS x 2
Signal/noise ratio	>90dB
Input sensitivity	150mV to 6V
Low pass filter	50 - 500Hz @ 12dB/octave
High pass filter	50 - 500Hz @ 12dB/octave
Pass thru RCA	Yes
Dimensions	436(L) x 235(W) x 58(D)mm

RESPUNSE

 Qty 1+
 Qty 2+
 Qty 5+

 \$229.00
 \$209.00
 182.95



www.jaycar.com.au

Freecall order hotline: 1800 022 888

Cat.

AA-0453

CAR AMPLIFIERS (CONTINUED)

Response Precision 500WRMS Linkable Class D Subwoofer Amplifier

Don't be fooled by this small package - it upstages many amps double its price and size! With a massive 500WRMS @ 10hm power output, this low profile pint-sized monoblock amp will push your subwoofers to their limits, yet will do so with greater efficiency and far less heat than class AB amps. Plus you get variable bass boost, adjustable phase shift, low pass & subsonic filter and master/slave operation.

Specifications	
Power/channel @ 1 Ohm mono 14.4V	
Power/channel @ 2 Ohm mono 14.4V	320WRMS
Power/channel @ 4 Ohm mono 14.4V	180WRMS
Signal/noise ratio	>90dB
Input sensitivity	150mV to 6V
Low pass filter	30 - 300Hz @ 24dB/octave
Subsonic filter	10-60Hz @ 24dB/octave
Bass boost	0-12dB @ 45Hz
Phase shift	0 -180°
Pass thru RCA	No
Dimensions	232(L) x 178(W) x 58(D)mm





\$179.00





Response Precision 1000WRMS Linkable Class D Subwoofer Amplifier

AA-0454

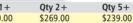
Monstrous, eardrum-perforating power and high efficiency in an extremely compact chassis. It has dual MOSFET power supplies and is stable driving 1 or 20hm loads. In addition, you get adjustable phase shift, bass boost, variable low pass & subsonic filters and master/slave operation.

- Speaker short, over current, thermal and DC protection
 4 AWG power terminals

Specifications	
Power/channel @ 1 Ohm mono 14.4V	1000WRMS
Power/channel @ 2 Ohm mono 14.4V	600WRMS
Power/channel @ 4 Ohm mono 14.4V	300WRMS
Power/channel @ 2 Ohm linkable,	1800WRMS
dual mono 14.4V	TOUUVVRIVIS
Signal/noise ratio	>90dB
Input sensitivity	150mV to 6V
Low pass filter	30 - 300Hz @ 24dB/octave
Subsonic filter	10-60Hz @ 24dB/octave
Bass boost	0 - 12dB @ 45Hz
Phase shift	0 -180°
Pass thru RCA	No
Dimensions	306(L) x 178(W) x 58(D)mm
7	Cat











Response Precision 4 x 100WRMS Full Range Digital Amplifier

AA-0455

A very efficient full range amp in a compact low-profile chassis. It is designed to drive full range speakers and delivers 550WRMS bridged. Features include insert-type connectors, variable high and low pass filters and variable bass boost. Ideally suited to our premium range of Kevlar coaxials, splits and VIFA subwoofers.

Specifications	
Power/channel @ 4 Ohm 14.4V	100WRMS x 4
Power/channel @ 2 Ohm 14.4V	150WRMS x 4
Power/channel @ 4 Ohm	300WRMS x 2
14.4V bridged	SUUVVRIVIS X Z
Signal/noise ratio	>90dB
Input sensitivity	150mV to 6V
Low pass filter	50 - 500Hz @ 18dB/octave
High pass filter	50 - 500Hz @ 18dB/octave
Bass boost	0 -18dB @ 45Hz
Pass thru RCA	No
Dimensions	292(L) x 178(W) x 58(D)mm









7	Cat.	Qty 1+
	AA-0457	\$259.00

Car Amplifier Wiring Kits

Complete wiring kits for installing an amplifier into your vehicle. Everything you need, down to the cable ties and screws. Save \$\$ on the individual parts.

8G WIRING KIT Cat AA-0442 • 6m x 8G power cables • 9m x 16G speaker wire

- 5.2m stereo RCA interconnect5.2m 18G remote wire
- Gold plated fuse holder
- 40A fuse
- Loom tubing, gold plated crimp connectors, grommets, cable ties & screws.

4G WIRING KIT Cat AA-0444 • 5.2m x 4G power cables • 9m x 16G speaker wire

- 5.2m stereo RCA interconnect5.2m 18G remote wire
- · Gold plated fuse holder
- Gold plated battery terminal
- 40A fuse
- Loom tubing, gold plated crimp connectors, grommets, cable ties & screws.

7	Cat.	Qty 1+	Qty 4+	Qty 10+
8G Wiring Kit	AA-0442	\$59.95	\$53.95	\$47.90
4G Wiring Kit	AA-0444	\$99.00	\$88.95	\$78.95



ACOUSTIC SOUND ABSORBING DEADENING MATERIALS

Ideal for car sound installations. One of the most hostile environments for a loudspeaker is in the door of a car. It is made out of flexible sheet steel which, when it is not vibrating & absorbing energy by rattling or buzzing, is reflecting energy all over the place! To produce Hi-Fi sound in a car you not only need to control the acoustics of the car environment. As any professional will tell you, it's the installation which makes for sound guality more than any other factor.

Heavy Duty Sound Barrier Damping Material

This is basically a flexible plastic-like material that forms an attenuating / reflecting sound barrier. The product is made of 25% PVC loaded and spread evenly with barium mineral powder which takes up the other 75%

(by weight) of the product. The barium mineral is very heavy and makes the vinyl heavy and impenetrable to sound waves. It's sort of like if lead was plastic! It weighs 4kgs per square metre. It is ideal for any surface that needs to be 'idealened' e.g. car.

waves. It's sort of like if lead was plastic!
It weighs 4kgs per square metre. It is ideal for
any surface that needs to be 'deadened' e.g. car
door or floor panels. It completely damps (ie prevents) any panel resonating from high
power speakers. It is also amazing for attenuating road noise from steel car floors, etc. It
can be cut with a hobby knife or good scissors etc. The material is held in place with
spray or gel contact cement. One sheet is generally enough for the average car door.
This product is superior to the
AX-3680 previously sold.

• Supplied in a polyethylene bag.

Specifications	
Sheet:	700 x 330 x 2.3mm thick (approx)
Sound transmission class:	26
Humidity:	Unaffected
Stability:	Indefinite

	- Chemical Resistance
Petrol/Diesel:	Moderate
Acetone:	Good
10% HCl:	Good
10% NaOH:	Poor
	 Mechanical Properties
Density:	1.74 g/cm3
Tensile:	3000N/50mm
Elongation:	<0.2%
Working Temp:	0°C to 95°C

7	Cat.	Qty 1+	Qty 4+	Qty 10-
Per Sheet	AX-3680	\$9.95	\$8.75	\$7.75

Sound Absorption Mat for Equipment

The noise of modern equipment can really annoy end users. To solve this with your equipment, we have sourced this high quality sound absorption material which is quick and easy to install.



The honeycomb material is chosen specifically due to its ability to reduce fan noise, vibrations, compressors and motors. Cooling fans in equipment is a particular annoyance to users and this material is perfect for reducing sound levels! With it's self adhesive backing, just cut to size and stick on the inside of your equipment and installation is completed. No mess or fuss. Made to UL94-VO flammability classification.

• Dimensions: 140 x 180mm, 2 sheets per pack.

71	Cat.	Qty 1+	Qty 4+	Qty 10+
	AX-3660	\$18.95	\$16.95	\$14.95

TECHNICAL DATA ON OUR ACOUSTIC PRODUCTS

Thickness & Absorbtion Performance

The basic rule of thumb here is the thicker the acoustic material the better it absorbs over a wide range of noise - especially at lower frequencies.

SOUND PATHS HITTING A FLAT SURFACE

When sound hits any surface, it takes three paths, some goes through the surface, some dissipates within it and some reflects back off the surface. Our Acoustic Products work primarily on attenuating reflected noise, but also helps contain dissipated noise.



Acoustic Tiles

With its anechoic wedge surface, Jaycar Acoustic Foam deflects and dissipates sound energy better than flat-surface or standard absorptive materials.



Self-Adhesive Sound Absorbing Foam

The perfect ultra light weight insulator to use in conjunction with AX-3687. This durable crush and tear- resistant material has the highest heat blocking properties available in a single layer synthetic foam-type material. Not affected by oil and does not absorb water. It provides acoustic isolation and excellent thermal insulation for roof, firewall, floor, quarter panels, doors and even as an under bonnet liner. Adhesive backed for easy installation.

• Dimensions: 660 x 330mm / Thickness: 5mm

• Temperature range: -15 - 100°C

7 Cat. Qty 1+ Qty 4+ Qty 10+ AX-3662 \$14.95 \$13.35 \$11.70

Butyl Based Sound Deadening Material

Give your vibrating buzz-box a luxury car ride with this butyl-based, foil backed sound deadening material. By adding weight to the metal panels of your car, such as door skins, boot lids, quarter panels, etc, you can stop nasty vibrations, reduce road noise, and give your doors and boot a nice solid "thud" when they shut. Each sheet is self-adhesive, and can be easily moulded, cut and stuck onto virtually any metal surface of your vehicle's body, giving you a pleasant, quiet and comfortable ride. Combine with our AX-3662 Sound Absorbing foam to add thermal insulation and eliminate low frequency humming from big exhaust systems for an even more comfortable vehicle interior.

• Dimensions: 900 x 330mm / Thickness: 1.5mm

• Temperature range: -10 - 110°C

7 Cat. Qty 1+ Qty 4+ Qty 10+ AX-3687 \$29.95 \$26.90 \$23.70

Combination Butyl/Foam Super Sound Deadener

Combining both the sound deadening properties of butyl material and insulating properties of honeycomb foam, this is an easy single application solution for complete sound deadening and isolation that also offers thermal insulation. Consisting of a layer of our AX-3687 Butyl Based sound deadener and a 3.0mm thick layer of honeycomb foam (similar to our AX-3662), lining the cabin of your vehicle with these sound deadening sheets will give you drastically reduced road noise, less panel vibration and a cooler cabin temperature. Application is easy with the self adhesive backing and ability to mould to the shape of the panel. Ideal for door skins, head linings, door cards and under bonnet insulation.

• Dimensions: 660 x 330mm / Thickness: 4.5mm (1.5mm butyl, 3.0mm foam)

• Temperature range: -10 - 100°C

7 Cat. Qty 1+ Qty 4+ Qty 10+ AX-3689 \$29.95 \$26.90 \$23.70

Sound Dampening Pads

Mainly designed for car audio, but could be used in any speaker application. These pads are installed inside the door skins opposite the back of the speaker drivers. They absorb standing waves and resonances so you get maximum performance. Each pack includes cyanoacrylate glue for installation.

DAMPENING PAD 7"Suitable for 5 - 7" drivers
Cat. AX-3665 Pair

DAMPENING PAD 12" Suitable for subs 10 - 15" Cat. AX-3666 Single





	Cat.	Qty 1+	
7" Pad - Pair	AX-3665	\$19.95	THE STATE OF THE S
12" Pad - Single	AX-3666	\$19.95	

Installing A Sound System In Your Car Booklet

There's more to installing a car sound system than simply twisting a few wires together and bolting amplifiers and speakers into place. This essential booklet explains amplifier configurations, the argument of a second battery and its advantages, noise filtering, speaker placement and the correct selection of DC cabling. The thorny issue of cable resistance is thoroughly covered as is speaker box venting and the need for adequate terminals and connections - making this guide an excellent, low cost investment!



• A4 8 pages.



	Qty 1+	
BI-8207	\$2.00	

Car Audio Accessories

CAR AUDIO ACCESSORIES

Line Level Control (Attenuator)

This unit when fitted in a signal line allows you to adjust downwards excessive signal levels. You may have, for example a source from a CD/MP3 player and a tuner. Often one source is too loud (at line level) to the other.

- RCA line sockets in/out



Ground Loop Isolator (Stereo) 3.5mm

Used to eliminate ground loop problems in audio installations. Has a 3.5mm stereo sockets on both ends Suitable for use with laptops, mp3 players, iPods® etc. Can be fastened to any surface, fitting etc by simple cable clamps. Very neat!



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-3086	\$9.95	\$8.75	\$7.75

Ground Loop Isolator (Stereo) RCA

Used to eliminate ground loop problems (usually manifested as a low hum) in audio connections. Earthing brown ground wires sometimes helps even more. Can be fastened to any surface, fitting etc by simple cable



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-3084	\$9.95	\$8.75	\$7.75

Speaker (High Level) to Line Level Converter

Converts high level (high power) speaker signals back down to low level (i.e. line or <1volt signals). You can then safely use those signals as line inputs to amps without potential damage to amps or other speakers. Features variable attenuators to reduce signal up to 6 times

- RCA socket out (stereo)
- External dimensions: 90(L) x 35(H) x 57(W)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	AA-0482	\$14.95	\$13.35	\$11.70

Three Channel Video Distribution Amplifier for Cars

This one-to-three video amplifier is ideal for automotive use and will let you share the video signal from your in-car video or DVD system with back seat passengers or other screens in the car. The built in amplifier ensures that all screens receive a full strength signal and produce the best possible picture. The amplifier will of course work with non-automotive applications where a video signal needs to be split into three channels without loss of signal strength.

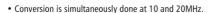
- · Composite video input/output
- One input to three outputs
 Works with all in-car video screens

- 12 volt powered Female RCA I/O connectors
- 63(L) x 32(W) x 30(H)mm Lead length: 200mm

71	Cat.	Qty 1+	Qty 4+	Qty 10+
	OC-3436	\$19.95	\$17.70	\$15.70

FM Converter for Japanese Imported Cars

When second hand Japanese cars are imported into Australia & New Zealand the FM section of the car stereo will not work locally because the Japanese FM band is unique in the world. It covers 76- 90MHz. You need a convertor which subtracts a fixed frequency from the local station to enable the FM section of the radio to work. The AM frequency in Japan & Aust/NZ are the same & the convertor lets AM signals go straight through.





LED SCROLLING SIGNS

Automotive LED Scrolling Message Signs

Attach this to the rear window of your car to display messages to other motorists. It could be used by taxi and bus drivers to communicate vacancy or destination, emergency traffic control vehicles could communicate messages to slow down. You can switch between pre-programmed messages easily with the supplied remote control and adjust the scrolling speed with ease. Two models are available.

SUCTION MOUNT AUTOMOTIVE LED SCROLLING SIGN

- Powered from 12VDC cigarette
- lighter socket • 350 red LEDs (7 x 50)
- Program up to 9 messages at 250 characters each
- Dimensions: 300(L) x 50(W) x 10(D)mm Cat. XC-0201



XC-0201

\$59.95 \$53.95 \$47.90

LED SCROLLING SIGN

This model comes with a cigarette lighter socket to mains adaptor so as well as automotive applications, it can also be used for shopfronts, schools, universities, car parks etc. Features rotateable stands.

- Powered from a 12VDC cigarette lighter socket or mains (with the supplied adaptor)
- 280 red LEDs (7 x 40)
 Program up to 10 messages
- at 80 characters each

Stand Mount Scrolling Sign

Dimensions: 430(I) x

Cat.	XC-	-0202	

90(H) x 65(D)mm Cat. XC-0202	XC-0202			
7	Cat.	Qty 1+	Qty 3+	Qty 6+
Suction Mount Scrolling Sign	XC-0201	\$49.95	\$44.90	\$39.90

XC-0202



DID YOU KNOW...

History of Electronics

- In 1893, Nikola Tesla made the first public demonstration of radio communication.
- In 1896, Gualielmo Marconi went on to develop a practical and widely used radio
- In 1904, John Ambrose Fleming invented the first radio tube, the diode.
- In 1906, Robert von Lieben and Lee De Forest independently developed the amplifier tube, called the triode.
- Electronics is often considered to have begun when Lee De Forest invented the vacuum tube in 1907.
- Within 10 years, his device was used in radio transmitters and receivers as well as systems for long distance telephone calls.
- In 1912, Edwin H. Armstrong invented the regenerative feedback amplifier and oscillator; he also invented the superheterodyne radio receiver and could be considered the father of modern radio.
- Vacuum tubes remained the preferred amplifying device for 40 years, until researchers working for William Shockley at Bell Labs invented the transistor in 1947.
- In the following years, transistors made small portable radios, or transistor radios, possible as well as allowing more powerful mainframe computers to be built.
- Before the invention of the integrated circuits in 1959, electronic circuits were constructed from discrete components that could be manipulated by hand. These non-integrated circuits consumed much space and power, were prone to failure and were limited in speed although they are still common in simple applications.
- By contrast, integrated circuits packed a large number often millions — of tiny electrical components, mainly transistors, into a small chip around the size of a coin.

ERAZ

Car Lighting - Interior

CAR LIGHTING - INTERIOR

T5 & T10 Replacement LED Globes - 12VDC

Replace or jazz up your automotive dashboard or indicator lighting with LEDs! Not only will they spruce up the look of your car, they are also long life with low current consumption and total reliability.

 T5 & T10 sizes to suit most applications.
• 12VDC





	100			-	AL PROPERTY OF
7		Cat.	Qty 1+	Qty 2+	Qty 4+
T5 Wedge LED Globe	White	ZD-0380	\$1.95	\$1.75	\$1.40
T5 Wedge LED Globe	Red	ZD-0381	\$1.95	\$1.75	\$1.40
T5 Wedge LED Globe	Blue	ZD-0382	\$1.95	\$1.75	\$1.40
T5 LED Globe B8.5D	White	ZD-0384	\$2.50	\$2.21	\$1.80
T5 LED Globe B8.5D	Red	ZD-0385	\$2.50	\$2.21	\$1.80
T5 LED Globe B8.5D	Blue	ZD-0386	\$2.50	\$2.21	\$1.80
7		Cat.	Qty 1+	Qty 2+	Qty 4+
T10 Wedge LED Globe	White	ZD-0390	\$1.95	\$1.75	\$1.40
T10 Wedge LED Globe	Red	ZD-0391	\$1.95	\$1.75	\$1.40
T10 Wedge LED Globe	Blue	ZD-0392	\$1.95	\$1.75	\$1.40
T10 Wedge LED Globe	Quad White	ZD-0394	\$3.50	\$3.15	\$2.85
T10 Wedge LED Globe	Quad Red	ZD-0395	\$3.50	\$3.15	\$2.85
T10 Wedge LED Globe	Quad Blue	ZD-0396	\$3.50	\$3.15	\$2.85
-					

T10 Wedge Replacement LED Globes - 12VDC

Spruce up the lighting on your set of wheels with some LED replacement globes. The SMD LEDs provide 360° illumination for even distribution of light.





7		Cat.	Qty 1+	Qty 4+	Qty 10+
	T10 Wedge 15 x White	ZD-0495	\$24.95	\$22.35	\$17.35
	T10 Wedge 15 x Red	ZD-0496	\$14.95	\$13.35	\$11.70
	T10 Wedge 15 x Yellow	ZD-0497	\$14.95	\$13.35	\$11.70

T1 3/4 Cluster Type LED Lamp

Suitable replacements for incandescent globes in instrument

clusters or instrument panels. Common Anode

- 14 LED Cluster (8 green/6 red)
 660nm for red/570nm for green
- 3 lead wire

3	
Specifications	
Power supply	10V @ 20mA
Output light	1950mcd @ 20mA
Cluster-type	Red/green T1 3/4 LEDs
Lens	Waterclear
Mounting hole diameter	M3
Size	26mm(dia) x 39mm(L)



71	Cat.	Qty 1+	Qty 3+	Qty 6+
T1 3/4	ZD-0350	\$9.95	\$8.75	\$7.75

ZD-0398

ZD-0486

ZD-0488

JC Type G4 LED Globe - 12VDC

LED Globe JC Type G4 White 12V

	71.
Specification	S
Input voltage	12VDC
Colour	White
Colour temp	5500k
Brightness	140 lm



JC Type GE White **Festoon LED Globes**

Interior lights in cars always blow when you need them most. Replace them with LEDs and never have a blown globe again. These festoon replacements have wide dispersion angle, are much brighter than conventional globes, last far longer and use less power.

ZD-0484

- Peak operating voltage: 16.8V
- Viewing angle: 120°
 Life: 20,000 hours
- Festoon LED globes

Luminous intensity (mcd) Forward current (mA)	5,000 60	5,000 60	8,000 90			A
7		Cat.	Qty '	1+ Qty	2+ (Qt
White 31mm		ZD-0484	\$12.	95 \$11	.35	\$8
White 36mm		7D-0486	\$12	95 \$11	35 (¢2



\$13.35

\$10.35

360° LED Festoon Lights - 12VDC

Replace your interior lights with LED replacements and never have to replace a blown globe again....unless you keep your car for about 4000 years, that is. Even then, the LEDs will outlast the car. 360° arc of illumination for even light distribution.

8 x White LED Festoon Globe 31mm Cat ZD-0481 8 x White LED Festoon Globe 36mm Cat ZD-0483



360° High Intensity LED Lamp

This high intensity LED lamp is especially designed for demanding outdoor applications. The LEDs are made from an advanced optical grade epoxy that offer superior tolerance to UV light, high temperature and shock. The lamp is ideal for low power applications such as marine navigation and anchor lights etc.

- Luminosity 83cd

- Max operating voltage 14V

				_
7	Cat.	Qty 1+	Qty 3+	Qty 6+
BA13S Socket	ZD-0360	\$24.95	\$22.35	\$17.35

BAY15D & BAY15S Auto Replacement Lamps

Suitable for off-road, marine and show use only. Utilising SMD LED technology, these replacement globes offer a 360° arc of illumination and high flux Piranha LEDs for high brightness. Suitable for parkers, reverse, tail and brake light replacements.

9 x White LED	BAY15D Stop/Tail Globe	Cat ZD-0361
9 x Red LED	BAY15D Stop/Tail Globe	Cat ZD-0365
9 x White LED	BA15S Globe	Cat ZD-0367
9 x Amber LED	BA15S Globe	Cat ZD-0369

7			Cat.	Qty 1+	Qty 4+	Qty 10+
	White	BAY15D	ZD-0361	\$24.95	\$22.35	\$17.35
	White	BAY15S	ZD-0367	\$24.95	\$22.35	\$17.35
	Amber	BAY15S	ZD-0369	\$24.95	\$22.35	\$17.35
7			Cat.	Qty 1+	Qty 10+	Qty 25+
	Red	BAY15D	ZD-0365	\$19.95	\$17.70	\$15.70

Reversing LED Light with Warning Buzzer

Replacement LED reversing light with built-in warning buzzer to warn pedestrians that you are reversing. Great for large caravans, trucks and busses.

- Suits vehicles with P21W BA15S reverse light bulbs.
- 9 Super Bright White LEDs
 Brightness: >6000 Lux
 Input voltage: 9 12VDC
- Current: <400mA Max SPL: 115dB

4

Qty 4+

\$7.95

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	ZD-0511	\$9.95	\$8.75	\$7.75

T10/211/BA9S 12V Automotive LED Kit

An easy to install LED kit to upgrade your cars interior light, dashboard light or even car parkers. Included is a 12 x LED array that can be connected to a T10, BA9s, or 211 base. The 211 base is spring adjustable so it fits a wide variety of car ceiling 211 sockets and the LED array has a 3m adhesive backing for easy mounting.

- Voltage: 12VDC · Colour: White
- LED array dimensions: 30(L) x 23(W) x 7(H)mm

7	Cat.	Qty 1+	Qty 2+	Qty 4+
	ZD-0580	\$9.95	\$8.75	\$7.75

Dash Mount Flashing LED -12V

With a metal bezel and a very bright 5mm LED, this flasher is excellent as a fake car alarm. Installed on your dash, thieves can be led to believe that your car is alarmed especially combined with our car alarm stickers (Cat. LA-5104).

)mm



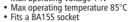
ORN 207BI

7	Cat.	Qty 1+	Qty 10+	Qty 25+
	Ι Δ-5082	\$6.95	\$6.25	\$5.50

White 41mm

\$14.95













Car Lighting – Headlight & Exterior

CAR LIGHTING - HEADLIGHT

Automotive LED Energy Saving Replacement Globes - H1, H3, H4 & H7

A series of energy saving, long lasting SMD LED replacements for your cars brake lights, reversing lights, interior ceiling lights, or custom made torches.

AUTOMOTIVE H1 16 X WHITE SMD LED 12/24V - ZD-0581

Base: H1

Voltage: 12VDC/24VDC

Power: 3.84WColour: White

• Dimensions: 69(L) x 24(Dia)mm



7D-0584

AUTOMOTIVE H3 16 X WHITE SMD LED 12/24V -

• Base: H3

• Voltage: 12VDC/24VDC • Power: 3.84W

· Colour: White

Dimensions: 138(L) x 22(Dia)mm

AUTOMOTIVE H4 18 X WHITE SMD LED 12/24V -

• Base: H4

Voltage: 12VDC/24VDCPower: 3.84W

Colour: White



• Base: H7

Voltage: 12VDC/24VDCPower: 3.5W

· Colour: White

• Dimensions: 47(L) x 33(Dia)mm

7	Туре	LEDS	Cat.	Qty 1+	Qty 2+	Qty 4+
	H1	16	ZD-0581	\$9.95	\$8.75	\$7.75
	H3	16	ZD-0582	\$9.95	\$8.75	\$7.75
	H4	18	ZD-0583	\$9.95	\$8.75	\$7.75
	H7	18	ZD-0584	\$9.95	\$8.75	\$7.75

HID Single Conversion Kits - 35W

These are a simple single version of a High Intensity Discharge (HID) headlamp that you are now seeing on up market cars. It is one lamp set only. HID provides more than 3 times the amount of light of a quartz halogen bulb. The clear white

light is similar to daylight, reflecting road markings and signs better than quartz halogen lights. HID lights are also more efficient and draw far less current than quartz halogen. These units are basically intended to convert a spotlight on, say a large boat, to a much more powerful and effective spotlight. The kit includes a 35W Xenon HID lamp, 6000*K, with H1, H3 or H4 base, ballast unit and wiring harness. They have a very simple installation. Light output approximately 3000 lumens at 12V.

Warning: State road and traffic authorities do not allow retrofitting of these

Kits to suit H1, H3 and H4 bases available:

its cover

products to cars with ordinary headlights - even if it's really simple to do so

7	Cat.	Qty 1+	Qty 4+	Qty 10+
35W H1	SL-3367	\$59.95	\$53.95	\$47.90
35W H3	SL-3365	\$59.95	\$53.95	\$47.90
35W H4	SL-3368	\$59.95	\$53.95	\$47.90

SI-3411

HID Single Beam Bulbs - 35W

Drop-in replacements HID bulbs. H3, H4 and H7 types available.

Specifications Power 2500 - 3,500 lumens Lumination 3000 hours Lifespan 3,000 - 30000K Colour temperature 70 - 100V Voltage



						-
7	Voltage	Type	Cat.	Qty 1+	Qty 4+	Qty 10+
	12V	H3	SL-3411	\$24.95	\$22.35	\$19.70
	12V	H4	SL-3412	\$24.95	\$22.35	\$19.70
	121/	Н7	SI-3/13	\$24.05	\$22.35	\$10.70

HID Dual Lamp Conversion Kits - 35W

Used in the latest model luxury and high performance cars, High that have indeed having and major performance calls, major intensity Discharge (HID) vehicle headlights are far brighter, whiter and more efficient than their quartz halogen predecessors. These HID dual lamp conversion kits are suitable for H4 bases and incorporate the latest in German engineering.

• 35W HID Xenon lamps

6000K colour temperature comparable to sunlight
 Extra bright 3200 lumens

Warning: State roads & traffic authorities prohibit the retrofitting of these products to cars with normal headlights. To be used only for off-road and showroom vehicles when replacing quartz halogen bulbs, or as



Available in two easy-installation models:

HID XENON DUAL LAMP CONVERSION KIT - LOW BEAM HID XENON DUAL LAMP CONVERSION KIT - HIGH/LOW BEAM REPLACEMENT BULB FOR HID KIT REPLACEMENT BALLAST FOR HID KIT

Cat SL-3414 Cat SL-3418

Cat SL-3416

Cat SL-3417

7			Cat.	Qty 1+	Qty 4+	Qty 10+
	35W Low Beam H	4	SL-3416	\$99.00	\$88.95	\$78.95
	35W High/Low Beam H	4	SL-3417	\$149.00	\$133.95	\$118.95
	Replacement High/Low H	HID Bulb	SL-3414	\$39.95	\$35.90	\$31.90
	Replacement Ballast for	HID Kits	SL-3418	\$49.95	\$44.90	\$39.90

12V LED Spot/Running Lamps

Waterproof, long life and easily installed. These super bright running lamps use 9 x LEDs to produce enough light to run during the day time or used as a spot/flood light fixture. The two piece set produces 120 lumens output improving road safety and visibility of vehicles on and off the road.

9 White LEDs

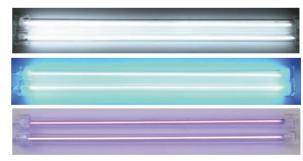
 Energy efficient 12V Brightness: 120 Lumen

Dimensions: 88(Dia)mm

				WARRANTY		
7	Cat.	Qty 1+	Qty 4+	Qty 10+		
	SL-3445	\$39.95	\$35.90	\$31.90		

CAR LIGHTING - EXTERIOR

2 x 300mm CCFL (Cold Cathode Fluorescent) Lighting Kit



These flickerless fluoro tubes produce an astounding amount of light for their tiny size of just 11mm dia. Encased in a clear tube they are designed for mounting inside a computer tower case (with a perspex window) but, also can be used for show cars, illuminating signs, cabinets, fish tanks etc.

They are 12VDC powered, supplied as a pair and come complete with adhesive Velcro® strip mounts, pre-wired rocker switch and a small sealed inverter that is pre-wired with a 280mm long cable to the tube & a 540mm power cord terminated to a standard computer hard drive plug & socket.

Current draw: 700mA

Available in three colours



7	Cat.	Qty 1+	Qty 5+	Qty 10+
White	SL-2855	\$14.95	\$13.35	\$11.70
Blue	SL-2856	\$14.95	\$13.35	\$11.70
UV	SL-2857	\$14.95	\$13.35	\$11.70

Car Lighting - Exterior

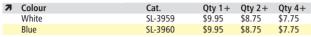
Exterior Automotive Pearl LED Kits

Easy to install pearl styled LED lights designed to add some luminescence to your vehicle. Adhesive backing plates allow you to stick them to any clean flat surface of your car.



- Pack of 8
- 12VDC
- Each LED is 25(Dia) x 18(H)mm

Two colours available:



2 x 6 LED Light 12VDC Strip Kits Pack of 2 x 6 bright LED flexible strip lights for adding extra illumination to your vehicle interior. Choose from a sharp blue colour or white. Just peel off the protective 3M cover and attach to a clean dry surface. Can be mounted virtually anywhere Two colours available

7	Colour	Cat.	Qty 1+	Qty 2+	Qty 4+
	White	SL-3951	\$14.95	\$13.35	\$11.70
	Blue	SL-3953	\$14.95	\$13.35	\$11.70

12VDC 9 x LED Flexible Strip Light Kits

Give your car the visual edge it deserves with this easy to install LED light strip. It's a flexible 250mm long strip with 9 x bright LEDs. Adhesive backing makes installation easy. Ideal for lighting under your car, in your engine bay, just above your accelerator pedal, and in corners/dark areas of your interior. A mountable on/off switch terminal is included for easier control.

- Strip Length: 250mm
- 12VDC 20,000 hour burn time
- Waterproof
- Features on/off switch

Two colours available:

7	Colour	Cat.	Qty 1+	Qty 2+	Qty 4+
	White	SL-3956	\$9.95	\$8.75	\$7.75
	Blue	SL-3957	\$9.95	\$8.75	\$7.75

12" Flexible 21 LED Light Tube

Many of you have probably seen LED lights styled similar to neons available from a few places, but not like this! Typically they are a line of LEDs mounted to a PCB at about 25mm intervals, mounted inside a clear acrylic tube. Our models have a major advantage over those units. Ours are FLEXIBLE!

They can mount straight, but will easily bend end-to-end, giving you a myriad of mounting options. You can't kink it like you would say, a garden hose, as the PCB inside will break if you push it too far, but they still provide excellent versatility. They are a great low current light source, drawing around 200mA. The tube is 24" (610mm) long, and houses 21 super bright LEDs. There are two models available, white and blue. The white unit is great for general low-current lighting in a caravan, 4WD etc., and the blue units will create a great glow in your car.

7	Cat.	Qty 1+	Qty 2+	Qty 4+
White	SL-3950	\$24.95	\$22.35	\$19.70
Blue	SL-3952	\$19.95	\$17.70	\$15.70

Under Car LED Light Kit with Remote Control

Switchable by remote control between red, green and blue. The kit comprises four 630mm long PVC strips with 12 groups of three LEDs and 2.5m cable, making it easy to position the strips for optimum effect.

All you need to do is connect 12V.





• Aluminium alloy + stainless steel construction, safe for marine

350mm

• 50.000+ hour life span

IP68 rated (waterproof)

Seoul Semiconductor LEDs

Shock proof

>90% optical/reflector efficiency

9-32VDC input (24V systems will



SL-3955 \$59.95 \$53.95 \$47.90

Solid LED Light Bars for 4WD/Marine - IP68

Unlike traditional halogen light, or even the newer HID lights, LED lighting is completely immune to shocks and vibrations. In a 4WD or marine application these shocks and vibrations are quite severe, and lead to a very short lifespan for a halogen or HID globe. More and more 4WD and marine enthusiasts are looking to LEDs as an alternative to traditional lighting for this very reason, and also for the other benefits that LEDs provide: long life expectancy, low power consumption and their small size.

These solid LED light bars are a serious alternative to the typical "driving lights" installed on the bull bars and roll bars of utes and 4WDs. The lumen output (light output) is extremely high, they are completely waterproof (IP68), shock proof, and feature a near unbreakable 100% optically clear polycarbonate front lens cover. The colour of the light is also a brilliant cool white, which is much better for illuminating objects at night, giving much clearer vision over a greater distance. On top of that, the light is an "instant on"

meaning 100% light output the instant you flick the switch. Each is supplied with alloy mounting feet, stainless steel hardware, and a wiring harness with remote rocker switch and relay Two models





RELATED PRODUCT

See our BRAND NEW Battery Condition Monitor on page 324



need 12V relay replaced with 24V item)

Specifications SL-3912 Lumen output 24W Power 60W Beam Pattern Flood (20°) Combination flood/spot (10°/20°) LED quantity -40°C to -60°C -40°C to -60°C Operating temp 290(W) x 85(W) x 90(H) mm 350(W) x 85(W) x 110(H) mm 135(L) x 85(W) x 90(H)mm Dimensions (no bracket) 195(L) x 85(W) x 110(H)mm Dimensions (w/bracket)



Qty 6+

Car Displays & Auto Testers

CAR DISPLAYS

Self-Powered LED Panel Meters

Simple and easy to install self-powered meters with voltage or current display. The voltmeter has a simple 2-wire connection, and the current meter has 4-wire connection with an included current shunt. Auto zero calibration and easy to read red LED display. Give your next project a truly professional look. Perfect for automotive, caravan or 4WD use. Cutout size 42 x 23mm

- Easy installationAutomatic polarity sensing
- Auto zero calibration
- Self powered

LED VOLTMETER 0 - 30V DC

Specifications	QP-5586
Power requirements	8 - 30VDC
Measurement range	8-30VDC
Maximum display count	999
Sample frequency	400mS



Cat QP-5586

LED AMMETER 0 - 50A DC

Specifications	QP-5588
Power requirements	8 - 30VDC
Measurement range	0-50A
Maximum display count	1999
Sample frequency	400mS



• Current shunt included Cat QP-5588

Note! When connecting the ammeter QP-5588 it is essential that the wiring instructions provided with the product are followed, or the meter may be destroyed.

7		Cat.	Qty 1+	Qty 5+	Qty 10+
	0 - 30VDC	QP-5586	\$24.95	\$22.35	\$19.70
	0 - 50ADC	QP-5588	\$39.95	\$35.90	\$31.90

Indoor/Outdoor Car Thermometer with Clock

A sleek in-car thermometer designed to give accurate temperature readings with individual sensors remotely wired for indoor and outdoor temperature. Ideal for keeping track of the temperature when you're on the road. The unit plugs into the vehicle's cigarette lighter socket

for power and also features an inbuilt clock.

- Input voltage: 12-24VDCSelectable blue or white LCD display
- Inside cable length: 2m
- Outside cable length: 3m
 Dimensions: 86(L) x 34(H) x 21(W)mm



Indoor/Outdoor Dual Display Thermometer

Another of our handy miniature thermometers, this one displays the inside and outside temperature simutaneously in °C on its LCD screen.

The unit will measure temperatures from -50°C to $+70^{\circ}\text{C}$ and and is ideal for keeping track of the temperature when travelling, or for general use around the home. The outside temperature sensor is fitted to a 3 metre cable.





7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-6326	\$22.95	\$20.35	\$18.35

Car Voltage Meter/Clock/Stopwatch

This meter features an LCD for the clock / stopwatch and battery voltage. There are also three LEDs which show battery condition.

· AA battery included.



It will work on both 12V and 24 volt systems and automatically selects the voltage. The clock can be set to 12 or 24 hour format. The stopwatch can be used for single event timing and lap counting which will time a cars speed over a predetermined distance, and this can be used on more than one car with velcro tabs for easy mounting anywhere.

• Small size only 115(W) x 27(H) x 15(D)mm

This is a crook picture - it actually looks much better than this!

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	XC-0118	\$39.95	\$35.90	\$31.90

Car Voltage Meter/In-Out Thermometer/Clock

Features an attractive EL-Blue backlit LCD which is constantly illuminated when

7



lighter socket for power but can be hard wired for permanent connection. Two LR44 button cells keep the clock powered when the car's ignition is switched off. Two temperature sensors monitor both the inside and outside temperature of the car, with the external sensor attached to a 3m



\$40.45

Great for drivers who frequent the snow fields! Specifications - Temperature Range

RELATED PRODUCT

• Siz

clock and calendar are also feature		Out:	-10° to		-
ze 145(W) x 34(H) x 32(D)mm.					
	Cat.	(Qty 1+	Qty 3+	

XC-0116

AUTOMOTIVE DMM

Automotive DMM with Inductive Pickup

- RPM x1, x10
- · Inductive pickup for RPM
- Dwell angle
- Resistance
- DC volts
- Temperature
- Frequency
- Duty cycle %
- · Data hold and relative function
- · Probes, alligator clip probes and holster included





Cat.

QM-1444

Otv 1+

\$59.95

A multimeter for all your automotive diagnostic needs. Features an inductive pickup for RPM measurement, dwell angle, frequency, duty cycle, data hold, relative function, backlit display and temperature, and works with engines of 2 to 10 cylinders. An absolute must have for the

of 2 to 10 cylinders.	An absolute must have for the or qualified tradesperson alike.	page 324
Specifications		
Display	4000 count	
Security Class	Cat III 600V	
Basic DCV accuracy	1.500%	
DC voltage	400mV, 4V, 40V, 400V, 600V (±1.5%)	
AC voltage	4V, 40V, 400V, 600V (±1.5%)	
DC current	400uA, 4mA, 40mA, 400mA (±1.5%), 4A,	, 10A (±2.5%)
AC current	400uA, 4mA, 40mA, 400mA (±1.8%), 4A,	, 10A (±3.0%)
Resistance	400R, 4k, 40k, 400k, 4M, 40M (±1.2%)	
Capacitance	40nF, 400nF, 4uF, 40uF, 100uF (±3.0%)	
Frequency	5Hz~10MHz (±1.2%)	
Inductance	-	
Temperature	-20°C to +760°C (±3.0%)	
Ave/RMS	Ave	
Input impedance	10M	
Special features	Inductive pickup, Dwell, RPM, duty cycle	
Dimensions	146(H) x 66(W) x 42(D)mm	



\$45.00





Otv 6+

\$47.90

Otv 3+

\$56.50

AUTOMOTIVE TESTERS

Automotive Blade Fuse Current Meter

This handy test unit make it so easy to measure currents on individual circuits. Simply plugs into a blade type fuseholder and displays the current draw on an easy-to-read LCD display.

• Makes it easy to find that circuit which is draining your car battery!



7			Cat.	Qty 1+	Qty 3+	Qty 6+
	0 - 20A	48V	QP-2251	\$19.95	\$17.70	\$15.70

Battery, Charger & Alternator Testers

These handy devices quickly indicate the condition of your car or truck battery, charger or alternator. They use 3 LEDs to indicate battery and charge under engine on/engine off conditions. Compact and lightweight, they include 600mm leads with crocodile clips, and an inbuilt magnet to secure the unit while taking measurements.

• Dimensions: 120(L) x 33(W) x 20(D)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
12V	QP-2258	\$12.95	\$11.35	\$10.35

3 - 28V Pro Grade Automotive Tester

This professional grade cordless voltage tester is designed for used on modern cars. The voltage tester detects from 3 to 28 volts. It will light up and buzz when positive voltage is detected. Made from rugged chrome metal construction it is safe to use with ECMs, air bags, sensors, transducers etc.

The circuit tester does not require a ground wire or clip, so it is easy to check in hard to reach places.
A probe is supplied with a V-Groove tip to make piercing wire insulation safe

И

AUTO & OUTOOR!



3 in 1 Digital Tyre Pressure Gauge

This pocket sized digital tyre gauge measures tyre pressure in four units, and also your tyre tread depth to take the guessing game out of when it's time to change your tyres. Features a large backlit LCD display for reading at night and also features a blue LED light in case you get caught out at night. A must have for any motoring enthusiast.

• Dimensions: 100(L) x 50(W)mm • Units of measure: PSI, Bar, Kgf/cm , kPa

Specifications - Tyre gauge					
Range	0-100PSI, 0-7.0Bar,0-7Kgf/cm ,0-700kPa				
Resolution	0.1PSI, 0.01Bar, 0.01Bar,).01Kgf/cm ,1kPa				
Accuracy	+/-1%				
Specification	s - Tread depth				
Range	0-22mm				
Resolution 0.01mm					
Battery	one CR2032 battery included				

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	OP-2297	\$14.95	\$13.35	\$11.70

Digital Tyre Pressure Gauge

Incorrect tyre pressure can have a detrimental effect on vehicle handling and cause uneven or premature tyre wear, which results in early (and expensive) tyre replacement. This simple device makes it easy to keep track of tyre pressure and avoid pressure related problems. The reading is displayed on the unit's built-in LCD screen. Includes an integrated torch for night measurements.

Displays in bar,Includes 2 x AA	PSI, or kPa. A batteries			JEHR)	
Specifications					DIGITECH OP2285 Tire pressure gauge O
Range	5 - 100PSI				SSUR
Resolution	0.1PSI				E GAU
Accuracy	+/- 0.5PSI				DP229
Operating temp	-10° - 40°C				10
Measures	156(L) x 42(W) x 2	0(H)mm			
7		Cat.	Qty 1+	Qty 3+	Qty 6+
		QP-2293	\$19.95	\$17.70	\$15.70

Cigarette Lighter Battery Monitor

Check the voltage output of your car's battery quickly and easily. Simply plug this handy voltmeter into the cigarette lighter socket and get an instant readout of the electrical system's voltage.

- Display resolution: 0.1V
- Accuracy: +/- 2%
- Operating voltage:
 8 30VDC





Qty 5+ \$17.70 OP-2220

12VDC Voltage Polarity Easy Tester

A passive, quick and easy testing solution that performs five essential tests in the field:

- 1. Voltage
- 2. Load Polarity
- 4. Voltage drop

ORE INFO AVAILABLE For full specifications see page 170

The load applied is selectable between 1A or 500mA to test wiring depending on location, device to be tested, and anticipated voltage drop. The illuminated power connector clearly displays polarity. Ideal for CCTV and security installers, car audio, roadies, AV techs etc.

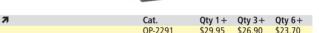
• Dimensions: 51(L) x 44(W) x 29(H)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QP-2215	\$24.95	\$22.35	\$19.70

Brake Fluid Tester

Digital brake fluid tester suitable for determining brake fluid quality. Quality is tested and indicated on five LEDs showing percentage of water in the brake fluid.





Automotive Multi-Function Circuit Tester with LCD

Designed to test the electrical system of an automotive vehicle running on 12V or 24V. One of the great features is being able to activate components with positive or negative without using a jumper wire. This would, for example, allow you to send voltage to a relay that controls whether or not a fan switches on. You can quickly test the voltage and polarity of a circuit or whether it's short or open, check continuity, locate cylinders which are misfiring, measure frequency of ignition pulses, test solenoids, lights and more. To top it all off the easy to read LCD is backlit so it's perfect for the dark crevices of an engine bay. All the features of a brand name unit at a fraction of the price.

• Works on 12 or 24V systems Dimensions: 240(L) x 78(H) x 40(W)mm

TEI



OM-1494

Digital Tachometer

This easy-to-use hand-held digital tachometer measures up to 99,999 RPM and features a large LCD, laser pointer, low battery indicator, and memory recall for the last displayed value, minimum value,

and maximum value. For full specs Specifications see page 170 Display 2000 count Test range 2.5 to 99,999 RPM 0.5% Basic DC accuracy 0.5 sec (over 120RPM) Sampling Autoranging 50 to 500mm Range select Detection distance Power consumption Batteries Dimensions



Qty 3+ Qty 6+ QM-1448 \$79.95 \$71.95 \$63.95





AUTO FUSES & HOLDERS

Standard Blade **Fuses**



Cat. SF-2126	1A	Black	Cat.	SF-2136	15A	Blue
Cat. SF-2127	2A	Grey	Cat.	SF-2138	20A	Yellow
Cat. SF-2128	3A	Pink	Cat.	SF-2137	25A	Clear
Cat. SF-2130	5A			SF-2139		
Cat. SF-2132	7.5A	Brown	Cat.	SF-2143	35A	Purple
Cat. SF-2134	10A	Red	Cat.	SF-2141	40A	Orang

Quantity breaks for one type only

7	Cat.	Qty 1+	Qty 10+	Qty 25+
	All Types / Each	\$0.85	\$0.75	\$0.65

Mini Blade Fuses

They look similar to the standard car blade fuses, except they are smaller. Used in new Holden Commodores,

raicons and more.						
2A	Grey	Cat. SF-1909				
3A	Pink	Cat. SF-1910				
5A	Orange	Cat. SF-1912				
7.5A	Brown	Cat. SF-1913				
10A	Red	Cat. SF-1914				
15A	Blue	Cat. SF-1915				
20A	Yellow	Cat. SF-1916				
25A	Clear	Cat. SF-1917				

Quantity breaks for one type only Qty 25+

	•	,, ,		
7	Cat.	Qty 1+	Qty 10+	Qty 25
	All Types / Each	\$0.95	\$0.85	\$0.75

Automotive Fuse Pack

This kit contains around 120 standard size automotive fuses housed in a 6 compartment storage box.

20 x 5A, 10A 15A, 20A, 25A & 30A fuses are included



7	Cat.	Qty 1+	Qty 10+	Qty 25+
	SF-2142	\$23.95	\$21.35	\$18.95

Blade Fuses Failure Lamp

Not your ordinary blade fuse, these have an integrated lamp which illuminates the moment the fuse blows. This makes finding that blown fuse a cinch, especially when the fuse is in a hard to get location, like under the car dashboard. They don't cost much either, so they are a very worthwhile investment.

- Ideal for circuits up to 32VDC
- 19(H) x 10.8(L) x 4(W)mm approx

7	Colour	Cat.	Qty 1+	Qty 10+	Qty 25+
3A	Pink	SF-5070	\$1.30	\$1.15	\$1.01
5A	Orange	SF-5072	\$1.30	\$1.15	\$1.01
7.5A	Brown	SF-5074	\$1.30	\$1.15	\$1.01
10A	Red	SF-5076	\$1.30	\$1.15	\$1.01
15A	Blue	SF-5078	\$1.30	\$1.15	\$1.01
20A	Yellow	SF-5080	\$1.30	\$1.15	\$1.01
25A	Clear	SF-5082	\$1.30	\$1.15	\$1.01
30A	Green	SF-5084	\$1.30	\$1.15	\$1.01
7	Colour	Cat.	Qty 1+	Qty 10+	Qty 25+
5-30A	Pkt 6	SF-5085	\$6.95	\$6.25	\$5.50

Micro Blade Fuses - 10 Pack

Micro-blade fuses to suit newer model cars The pack contains one each of 5, 7.5, 25, 30A and two each of 10, 15, 20A.

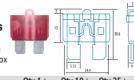


\$8.75

\$7.75

Standard **Blade Fuses**

Measures: 20.6(H) x14.4(L) x 5(W)mm approx



7	Colour	Cat.	Qty 1+	Qty 10+	Qty 25+
3A	Pink	SF-5020	\$1.20	\$1.05	\$0.95
5A	Orange	SF-5022	\$1.20	\$1.05	\$0.95
7.5A	Brown	SF-5024	\$1.20	\$1.05	\$0.95
10A	Red	SF-5026	\$1.20	\$1.05	\$0.95
15A	Blue	SF-5028	\$1.20	\$1.05	\$0.95
20A	Yellow	SF-5030	\$1.20	\$1.05	\$0.95
25A	Clear	SF-5032	\$1.20	\$1.05	\$0.95
30A	Green	SF-5034	\$1.20	\$1.05	\$0.95
7		Cat.	Qty 1+	Qty 10+	Qty 25+
5-30A	Pkt 6	SF-5035	\$5.95	\$5.25	\$4.75

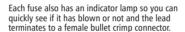
Wire Tapped Mini Blade Fuses

Mini size blade fuses with a 200mm long flying lead so you can easily tap off the right circuit to install accessories or diagnose problems. Each fuse also has an indicator lamp so you can quickly see if it has blown or not and the lead terminates to a female bullet crimp connector.

7	Cat.	Qty 1+	Qty 10+	Qty 25+
10A	SF-5120	\$6.95	\$6.25	\$5.50
15A	SF-5122	\$6.95	\$6.25	\$5.50
20A	SF-5124	\$6.95	\$6.25	\$5.50

Standard Blade Fuses

Standard size blade fuses with a 200mm long flying lead so you can easily tap off the right circuit to install accessories or diagnose problems.



7	Cat.	Qty 1+	Qty 10+	Qty 25+
10A	SF-5110	\$6.95	\$6.25	\$5.50
15A	SF-5112	\$6.95	\$6.25	\$5.50
20A	SF-5114	\$6.95	\$6.25	\$5.50

Maxi-Blade Fuses



Suits our range of compression fitting platinum car connectors.

- Gold-plated for minimum resistance & maximum current transfer.
- Fuses supplied in packs of two

30A Cat. SF-1942 100A Cat. SF-1950



Quantity breaks for one type only

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	All Types / Pkt 2	\$8.95	\$7.95	\$6.95

30A Blade Fuse Holder

Accepts standard car type blade fuses. Supplied with heavy duty cable in a loop. Simply cut and join to





\$2.60

4G Platinum Inline Maxi **Blade Fuseholder**

These Inline fuse holders accept our range of gold-plated maxi fuses and uses compression fitting goldplated cable termination. Put this next to your battery to protect your hotline from a short-circuit, or runaway amplifier.



		•	_	
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	SZ-2082	\$14.95	\$13.35	\$11.70

Panel Mount Blade Fuse Holder

Panel mount for auto or marine applications. Takes standard blade fuses, rated for 12VDC 30A max.

Cover included



Note				use
not	incl	ud	ed	

7	Cat.	Qty 1+	Qty 10+	Qty 25+
	SZ-2046	\$3.95	\$3.45	\$3.15

30A Blade Fuse Holder with Failure LampWater Resistant

These fuse holders accept ordinary blade fuses and have an integrated lamp that will light up when the fuse blows, making it easy to find the offending fuse. This is especially useful if the fuse is in a difficult or crowded location. They are supplied with 110mm leads and available to suit standard blade and miniblade fuses.

- 30A max rating
- Ideal for circuits up to 32VDC

Туре	Cat.	Qty 1+	Qty 10+	Qty 25+
Standard	SZ-2042	\$4.95	\$4.45	\$3.90
Mini Blade	SZ-2043	\$4.95	\$4.45	\$3.90

30A Blade - Stackable

These fuseholders accept standard blade fuses. They slide together if more than one is required, so you could have a bank of these mounted in your car. They have a cap over the front which makes them look very neat and tidy.

- Handle 30 amps. Supplied with a wire loop, which can be cut to suit
- 41(I) x 24(H) x 10(W) mm
- Low volt DC only

7	Cat.	Qty 1+	Qty 10+	Qty 25+
	SZ-2045 each	\$3.95	\$3.45	\$3.15

Automotive Fuse Box

- 6 Blades

Fits six standard car blade fuses. Fibreglass reinforced nylon base with splashproof polycarbonate cover.



- 15A/circuit max
- 6.3mm OC terminals
- Measures 112(L) x 46(W) x 40(H)mm

7	Cat.	Qty 1+	Qty 10+	Qty 25+
	SZ-2002	\$12.95	\$11.35	\$10.35

CIRCUIT PROTECTION (CONTINUED

10 Way Blade Fuse Block with LED Indicators

Perfect for automotive or marine applications. Features a common supply rail and includes a removable protective cover and LED indicators for each fuse.



Dimensions: 95(L) x 85(W) x36(H)mm

• Input: 100A Max

Output: 30A Max Per Circuit



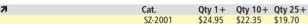
Cat. **Qty 1**+ \$19.95 Qty 10+ Qty 25+ \$17.70 SZ-2008

Waterproof Fuse Block with LED Indicators

This 10-way waterproof fuse block is perfect for a marine application, keeping fuse and wiring connections well protected from corrosion. Each fuse socket has an LED indicator to give you quick indication of blown fuses, and there are also a number of slots to fit spare fuses. Designed for panel mount applications

• Dimensions: 125(W) x 89(H) x 47(D)mm

Fuses not included (without cover)



60 Amp Fuse Holder

- Accepts 5AG fuse.Supplied with a small length of cable, simply cut and join in-line.

 • 80(L) x 19(D)mm.

7	Cat.	Qty 1+	Qty 10+	Qty 25+
	SZ-2065	\$7.95	\$6.95	\$6.25

Gold Fuseholder With Mounting Bracket

Gold contacts and will accept both 8G & 4G cable. A mounting bracket is incorporated Length 80mm - accepts 5AG fuses.



				(CHAMAINO)
71	Cat.	Qty 1+	Qty 4+	Qty 10+
	SZ-2060	\$9.95	\$8.75	\$7.75

5AG Gold Fuses

These fuses suit our fuseholders shown here. They have gold plated ends and the inside conductor is also gold. Available in a range of current ratings.



• Fuse size 38(L) x 10(Dia)mm

AMP-KING

7		Cat.	Qty 1+	Qty 4+	Qty 10+
	20 amp	SF-1970	\$2.25	\$1.95	\$1.80
	30 amp	SF-1972	\$2.25	\$1.95	\$1.80
	40 amp	SF-1974	\$2.25	\$1.95	\$1.80
	50 amp	SF-1976	\$2.25	\$1.95	\$1.80
	60 amp	SF-1978	\$2.25	\$1.95	\$1.80

Gold AML Wafer Fuses

These wafer fuses feature gold finish screw-down contacts for maximum current transfer and conductivity and are designed for really high current applications such as for car audio amplifiers, etc.



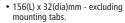
AMP-KING

- Use with our SZ-2075 Inline Wafer Fuseholder.
- 5 current ratings available

	3				
7		Cat.	Qty 1+	Qty 4+	Qty 10+
	80 amp	SF-1990	\$8.95	\$7.95	\$6.95
	100 amp	SF-1992	\$8.95	\$7.95	\$6.95
	150 amp	SF-1995	\$8.95	\$7.95	\$6.95
	200 amp	SF-1997	\$8.95	\$7.95	\$6.95
	250 amp	SF-1999	\$8.95	\$7.95	\$6.95

Inline AML Wafer Fuse Holder

Designed for high end car audio installations. Suits 4, 2 & 0 gauge cable. 2 "O" rings keep moisture out as well as grommets at each end. Accommodates wafer type fuses with gold screw-down connections. Supplied with two gold-plated down-sizer rings to ease cable termination





7	Cat.	Qty 1+	Qty 4+	Qty 10+
	SZ-2075	\$24.95	\$22.35	\$19.70

CIRCUIT BREAKERS

Chassis Mount Auto Circuit Breakers

Single pole thermal circuit breaker.

· Auto or manual reset.



7		Cat.	Qty 1+	Qty 10+	Qty 25+
20A	12VDC	SF-4100	\$11.95	\$10.70	\$9.50
30A	12VDC	SF-4102	\$11.95	\$10.70	\$9.50
40A	12VDC	SF-4104	\$11.95	\$10.70	\$9.50
50A	12VDC	SF-4106	\$11.95	\$10.70	\$9.50
20A	24VDC	SF-4108	\$11.95	\$10.70	\$9.50

2 x 60 Amp Circuit Breaker

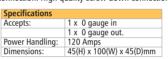
Use this high current inline distribution circuit breaker and never have to pay for expensive fuses ever again. It accepts 3 x 4 gauge cable in, running to two resetable 2 gauge outputs. This 2 x 60amp circuit breaker offers a lower voltage drop than a fuse and can be used as an occasional circuit isolation switch. Ideal for high quality car audio installations



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	SZ-6000	\$29.95	\$26.90	\$23.70

120 Amp with Voltage Display

Never pay for expensive high current fuses ever again. Featuring a 3 digit LED voltage display so you can keep an eye on the battery's condition, a status LED which will illuminate only when there is a complete connection. High quality screw down connections.



	 . ,	. ,			
7		Cat.	Qty 1+	Qty 4+	Qty 10+
		SZ-6002	\$39.95	\$35.90	\$31.90

NOTE!!!

Most of the products shown on these pages are designed for powering accessories in cars and trucks. They are perfect for example in wiring big power amps in your car. If you intend to use these components for critical applications (say, where safety is an issue) we suggest that you wire multiple circuits if possible and limit the current in each circuit accordingly. Then if you lose one circuit you will have some redundancy. You don't, for example want to lose your headlamp circuit at night because of Deep Purple! This principle, of course, applies to all high current wiring.

GOLD FUSED POWER DISTRIBUTION BLOCKS

Two Way with Voltage Display

Accepts 1 x 2 gauge cable in, running to 2 individually fused 4 gauge outputs. It uses wafer style fuses, which screw down for maximum current transfer. A great feature of this distribution block is the 3 digit LED voltage display, so you can keep an eye on your battery's condition. It also has status LEDs, which only illuminate when there is a complete connection, so you can locate blown fuses at a glance.

• N.B. Earthing screws should be connected for display to work

Measures 102(L) x 100(W) x 37(H)mm

 AME	P-KING		WARRANTU
Cat.	Qty 1+	Qty 4+	Qty 10+
\$7-2076	\$39.95	\$35.90	\$31.90

Two Way Distribution Block This block will accept one 4GA (thick) cable.

The power passes through fuses, then to 2 outputs for 8GA (thin) cable.

• Size 102(L) x 51(W) x 32(H)mm

Accepts 5AG fuses - fuses extra				WARRANTY
7	Cat.	Qty 1+	Qty 4+	Qty 10-
	57 2070	\$24.95	\$22.35	\$19.70

Gold Power Distribution Block

This block will accept one 4G wire in, and distribute to four 8G out.

Size includes mounting bracket 63(L) x 50(W) x 25(H)mm.



		46.00	
Cat.	Qty 1+	Qty 4+	Qty 10+
HC-4020	\$12.95	\$11.35	\$10.35

424

AMP-KING

We now stock

0 Gauge cable

see page 207

Qty 4+ Qty 10+

\$2.30

Qty 10+

Qty 10+

\$2.60

Qty 4+

Qty 4+

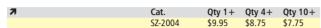
Otv 1+

16 Way 100A Brass Distribution Bar

An ideal way to distribute high current paths. An 8mm stud provides for incoming cable and distribution is via 16 screw terminals with 7mm cable entry holes.

· Solid brass with high quality plastic bridge mounts

 Rated for 100A, suitable for high-power car audio power distribution or multiple earth links • Dimensions: 112(L) x 18(W) x 12(H)mm



AUTO TERMINAL SETS

Gold Plated Battery Terminals

This terminal is made from brass, and is gold plated. It has a 6mm bolt, and wing nut on which our gold terminals can be connected to run cabling to

• Suits positive car battery terminals



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	HC-4040	\$9.95	\$8.75	\$7.75

RELATED PRODUCT

See our full range of Automotive Test Equipment on page 169 - 170.

4 Wire 2G + 4G + 2x8G **Battery Terminals**

These 4 wire gold battery terminals will accept one 2GA, 4GA cables and two 8G

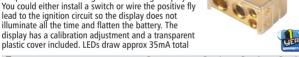
cables. These units come complete with

NOTE: Cable not included

7		Cat.	Qty 1+	Qty 4+	Qty 10+
	Positive	HC-4048	\$19.95	\$17.70	\$15.70
	Negative	HC-4049	\$19.95	\$17.70	\$15.70

4 Wire Gold Plated Battery **Terminal with LED Voltage Display**

Designed to mount on the positive terminal on the car battery. It accepts 2 x 8G (thin) cables, 1 x 4G (thick) cable, and 1 x 2G (very thick) cable. What makes it unique is the built in 3-digit red LED voltage display. You could either install a switch or wire the positive fly lead to the ignition circuit so the display does not illuminate all the time and flatten the battery. The display has a calibration adjustment and a transparent

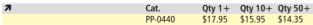


7	Cat.	Qty 1+	Qty 4+	Qty 10+
	HC-4046	\$29.95	\$26.90	\$23.70

GOLD CAR SOUND CONNECTORS

4 Way Banana Plug/Socket Assembly

Basically just 4 male and 4 female banana plugs. This connector is ideal for use in car audio applications, such as speaker or even power connections. Just mount one side in the boot of your car or to your speaker box for easy installation. Cable termination is via gold-plated grub screws, and plugs are labelled +, -, , + to quickly identify correct polarity when installing



Gold Plated High Current Cable Joiners

If you have ever tried to connect, crimp or solder 8G or even 4G cable you will understand how convenient these gold-plated brass connectors are. Cable termination is via gold grub screws and joiner is supplied with small transparent insulating heatshrink tube.



7		Cat.	Qty 1+	Qty 4+	Qty 10+
	Suit 8G cable	HC-4065	\$7.95	\$6.95	\$6.25
	Suit 4G cable	HC-4064	\$7.95	\$6.95	\$6.25

reen rip	
Ga = gauge or standard	OG - Outside dia of 15mm - actual cable is 45mm ² 2G - Outside dia of 12mm - actual cable is 35mm ²
wire size	4G - Outside dia of 10mm - actual cable is 20mm ²
	8G - Outside dia of 6mm - actual cable is 8mm²

Gold Plated Power Terminals

Make terminating large power cables simple and neat, with no need for crimping. Each has a grub screw for attaching to the power cable, and is gold plated for a professional look.

To run OGA cables to equipment and battery terminals

• 8mm bolt hole • 52mm length

AMP-KING

To run 2GA cables to equipment and battery terminals

8mm bolt hole 57mm length

To run 4GA cables to equipment and battery terminals

8mm bolt hole • 56mm length

OGA TO 4GA Gold Plated Adaptor Terminal Allows connection of OG cable to 4G screw down connections, such as on our gold battery terminals or car amplifiers

• 8 6mm shaft

• 55mm length

- 6.0mm shart - 55mm length				
7	Cat.	Qty 1+	Qty 4+	Qty 10+
0GA	HC-4068	\$8.95	\$7.95	\$6.95
2GA	HC-4066	\$8.95	\$7.95	\$6.95
0 - 4GA	HC-4069	\$8.95	\$7.95	\$6.95
7	Cat.	Qty 1+	Qty 4+	Qty 10+
4GA	HC-4062	\$8.95	\$7.95	\$6.95

Gold Plated Terminals

Supplied in pairs. 1 red and 1 black.

SMALL EYE - CRIMP

Specifications	
Hole size	3.7mm
Cable hole diameter	4.8mm
Size including cover	35mm
Metal thickness	1mm

ncluding cover		AMP-KIN
thickness	1mm	
		,



AMP-KING

AMP-KING

QC GOLD CONNECTORS LARGE EYE RED & BLACK

Suits thinner cable (8GA): 1 x Red & 1 x Black.

Specifications	
Hole size	8.4mm
Cable hole dia	4.8mm
Size including cover	42mm
a .	

Hole size	8.4mm	
Cable hole dia	4.8mm	
Size including cover	42mm	
a b :		

7	Per pair	Cat	Qty 1+
	1 x Red & 1 x Black	PT-4562	\$2.95

4G QC GOLD CONNECTOR LARGE EYE RED & BLACK

Suits Large Cable (4GA):
• Pack 1 black and 1 red

Specifications	
Hole size	8.4mm
Cable hole dia	8mm
Size including cover	50mm
Metal thickness	1.5mm

7 Por nair	
Metal thickness	1.5mm
Size including cover	
Cable hole dia	8mm
Hole size	8.4mm

Лe	tal thickness	1.5mm	
7	Per pair		Cat
	1 x Red & 1 x	Black	PT-4564

GOLD PLATED CRIMP CONNECTOR 12.7MM EYE RED & BLACK PAIR

dits 20A cable.	
Specifications	
Eye hole size	12.7mm
Cable hole dia.	9.6mm
Size including cover	60mm

Specifications	
Eye hole size	12.7mm
Cable hole dia.	9.6mm
Size including cover	60mm
Metal thickness	1.5mm

Suite 2GA cable

7 Per pair		
Metal thickness	1.5mm	
Size including cover	60mm	
Cable Hole ula.	9.0111111	

1 x Red & 1 x Black	PT-4565	\$5.95
86 GOLD BLATED FORKED	SDADE TERMINALS	

Suits thinner cable (8GA):

• 1 x Red & 1 x Black

Specifications	
Hole size	3.7mm
Cable hole dia	4.8mm
Size including cover	33mm

Hole size	3.7mm
Cable hole dia	4.8mm
Size including cover	33mm
a b :	

Per pair	
1 x Red & 1	x Black



Cat

Size	5./111111
hole dia	4.8mm
ncluding cover	33mm

Per pair	cat	Qty I+	Qty 4+	Qty 1
1 x Red & 1 x Black	PT-4566	\$2.95	\$2.60	\$2.30

OC CONNECTORS FORKED SPADES

Standard quick connect lugs that fit speaker terminals etc.

Cable hole diameter - 3.7mm

• 1 x red & 1 x black.



• 1	x red & 1 x black.	AMP-KING	1	-	No. of Concession, Name of Street, or other Designation, or other
7	Per pair	Cat	Qty 1+	Qty 4+	Qty 10+
	1 x Red & 1 x Black	PT-4568	\$2.50	\$2.21	\$1.95



CAR ANTENNA

Car Radio Antenna Line Plug

Solder type Standard antenna plug



7	Cat.	Qty 1+	Qty 10+	Qty 50+
	PP-2040	\$1.65	\$1.45	\$1.30

Car Radio Socket Chassis Mount

Nickel plated



7	Cat.	Qty 1+	Qty 10+	Qty 50+
	PS-2042	\$1.95	\$1.75	\$1.55

Car Radio Antenna Line Plugs

SOLDERLESS CAR RADIO ANTENNA LINE PLUG



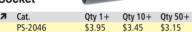
PP-2041

LINE PLUG - PLASTIC Replacement or connector for new antenna

installation. · Solder type with plastic strain relief.

7	Cat.	Qty 1+	Qty 10+	Qty 50+
	PP-2044	\$2.95	\$2.60	\$2.30
	Cat.	Qty 1+	Qty 10+	Qty 50+
	PP-2041	\$2.50	\$2.21	\$1.95

Solderless Car **Radio Inline** Socket



Car Radio Antenna **Adaptor Plug**

to European style antenna sockets

PA-2048



\$4.95

\$4.45

\$3.90

Car Radio Antenna **Adaptor Plug**

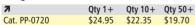
Converts European style antenna plug to Motorola style antenna plug.

7	Cat.	Qty 1+	Qty 10+	Qty 50+
	PA-2038	\$4.95	\$4.45	\$3.90

SPECIAL APPLICATION

OBD II 16 Pin Connector

Most new cars sold in Australia have an OBD (On-Board Diagnostics) system. This connector interfaces with the current-standard 16 pin OBD-II socket for data analysis, performance tunina etc.



2 Pin 32 Volt Plugs & Sockets

For low voltage applications such as caravans etc up to 15amps.



		4		
Line Socket PS-2073	Surface Soc PS-2074		ine Plug P-2075	
Cat.	Qty 1+	Qty 10+	Qty 50+	
PS-2073	\$16.95	\$14.95	\$13.35	
PS-2074	\$16.95	\$14.95	\$13.35	
PP-2075	\$8.95	\$7.95	\$6.95	

AUTOMOTIVE

MERIT Plugs & Sockets

These are fast becoming the new standard in automotive power connectors. In fact, they have been used in some European bikes and cars for several years and are ideal when size and reliability of connection are important. Smaller in size than existing cigarette lighter connectors, they also have the advantage of a superior rugged construction and higher current carrying capability. The panel sockets feature a flip down cover to resist ingress of moisture and dust, and can withstand long periods of sustained current draw (unlike the el-cheapo versions of these connectors!). We have even included a modular merit plug to cigarette lighter adaptor in our range for those people who need both styles in a single connector (like those used on popular brands of 4WD fridges and spotlights).

PP-2090	Unfused Merit Plug (15A)
PS-2092	Merit Panel Socket with Sprung cover (max 15A
PP-2094	Merit Plug with Cigarette Lighter adaptor
	(fused max 8A)

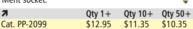
PS-2096 In-line Merit Socket with Cover (max 15A)



7	Cat.	Qty 1+	Qty 10+	Qty 50+
	PP-2090	\$5.95	\$5.25	\$4.75
	PP-2094	\$6.95	\$6.25	\$5.50
	PS-2092	\$9.95	\$8.75	\$7.75
	PS-2096	\$6.95	\$6.25	\$5.50

Merit Plug to Cigarette **Lighter Socket**

Allows you to connect mobile phone chargers and other cigarette lighter plugged devices into vehicles equipped with a Merit socket.



Automotive Multi-Way Plug / Sockets - 250 Series

This range is commonly used in automotive applications such as stereo and CB installations, or for replacements in existing wiring. The housings interlock and they come in 2, 3, 4, 6 or 8 way sets. Each comes with plug, socket, and male and female locking spade lugs.



7	Cat.	Qty 1+	Qty 10+	Qty 50+
2 Way	PP-2062	\$2.95	\$2.60	\$2.30
3 Way	PP-2064	\$3.45	\$3.05	\$2.75
4 Way	PP-2066	\$3.95	\$3.45	\$3.15
5 Way	PP-2068	\$4.95	\$4.45	\$3.90
3 Way	PP-2069	\$6.95	\$6.25	\$5.50

Auto Waterproof Plug & Socket Sets

Waterproof automotive connectors commonly used on many modern cars for wiring connections within the engine bay and other areas that are exposed to moisture. The interlocking parts are surrounded by a rubber seal, while an individual grommet seals each wire. Each package includes plug, socket, cable

Current rating: 20A (max.) Pin spacing: 7.5mm Assembled Length: 70mm

grommets & crimp pins

7	Cat	Qty 1+	Qty 10+	Qty 50+
2 Way	PP-2110	\$7.95	\$6.95	\$6.25
3 Way	PP-2112	\$10.95	\$9.75	\$8.75
4 Way	PP-2114	\$16.95	\$14.95	\$13.35
6 Way	PP-2116	\$19.95	\$17.70	\$15.70

MULTI PIN (MOLEX)

Multi Pin Plug / Socket

Each set consists of nylon body for male/female along with male/female socket pins to fill all available poles. Will mate with standard MOLEX-type connectors.



7	Cat	Qty 1+	Qty 10+	Qty 50+
2 Pole	PP-2020	\$2.75	\$2.45	\$2.15
3 Pole	PP-2022	\$2.95	\$2.60	\$2.30
6 Pole	PP-2024	\$3.95	\$3.45	\$3.15
12 Pole	PP-2026	\$6.95	\$6.25	\$5.50

MULTI PIN (MOLEX)

Miniature Nylon **MOLEX-Type Connectors**

These connectors are suitable for high current/high density, wire-to-wire or wire-to-board applications. They are suitable for both power and signal connections.

- Fully isolated terminals
- Positive housing locks
- · Four point of contact for reliability Low engagement force terminals

Applications:

- Security and alarms
- Vending and gaming machines
- White goods
- · Production equipment · Broadcast equipment
- Telecom infrastructure
- · Male and female pins supplied

7	Cat.	Qty 1+	Qty 10+	Qty 50+
2 Pin	PP-2021	\$2.75	\$2.45	\$2.15
3 Pin	PP-2023	\$2.95	\$2.60	\$2.30
4 Pin	PP-2027	\$3.45	\$3.05	\$2.75
6 Pin	PP-2025	\$3.95	\$3.45	\$3.15

Wired Multi Pin Plugs / Sockets



Heavy duty plug and socket with bullet type connectors.

- Pre wired with 18AWG wire.
- · Extremely handy when cables need to be periodically unplugged.
- Bullet style connectors

71	Cat.	Qty 1+	Qty 10+	Qty 50+
2 Way	PP-2034	\$3.45	\$3.05	\$2.75
4 Way	PP-2030	\$8.95	\$7.95	\$6.95
6 Way	PP-2032	\$11.95	\$10.70	\$9.50

EXTRACTION TOOL

Pin Extraction Tool

Take the frustration out of removing Molex connector pins with these time save tools. Simply slide the tool over the connector and push the plunger to effortlessly remove the pin. Both male and female pin extractors available.



CIGARETTE LIGHTER PLUGS

3 Amp Lead With Bare Ends

Lead with a 3 amp fused cigarette lighter plug on one end. Internal fuse: 10A, 3AG

Cable length: 450mm approx
Cable thickness: 18AWG

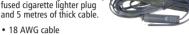
Surplus purchase



PP-1998

8 Amp Lead With Bare Ends

A lead consisting of an 8 amp fused cigarette lighter plug and 5 metres of thick cable.



7	Cat.	Qty 1+	Qty 3+	Qty 6+
3A	PP-1995	\$2.95	\$2.60	\$2.30
	Cat.	Qty 1+	Qty 3+	Qty 6+
8A	PP-1998	\$9.95	\$8.75	\$7.75

Cigarette Lighter Plug

Simply plugs into the car cigarette lighter socket to obtain 12VDC from the car battery.

· Economy grade



PP-2001

Cigarette Lighter Plug - Fused

As PP-2000 but with the added safety benefit of being fused. Supplied with 3A fuse.

Recommended

ECONOMY	Qty 1+	Qty 10+	Qty 50+
PP-2000	\$1.65	\$1.45	\$1.30
FUSED			
PP-2001	\$3.95	\$3.45	\$3.15

Automotive cigarette lighter wiring rarely allows more than 15A to be taken from this circuit.

CIGARETTE LIGHTER ADAPTORS

Fused Cigarette Lighter Plug to 2.1mm DC Plug

Has an internal fuse & LED power indicator.

- · Supplied with 3A, 3AG fuse
- Cable length 500mm Surplus purchase

Fused Cigarette Lighter Plug to 2.5mm DC Plug

Has an internal fuse and LED power indicator



5A 3AG fuse Cable length 1.5 metres



Cigarette Lighter Adaptor Cable

Contains no circuitry and allows you to power 12V devices from your car cigarette lighter



- · Cable length: 1.8m
- LED power indicator. Supplied with 8 DC plugs. 2.35 x 0.75, 3.5 x 1.35, 4 x1.7, 5.5 x1.5, 5 x 2.1, 5.5 x 2.5, 2.5mm & 3.5mm. (OD first then ID)

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	PP-1996	\$8.95	\$7.95	\$6.95

3 Metre Cigarette Lighter with Retractable Extension Cord

Rugged housing helps keeps the cord free from damage. Idea for four wheel drive use.

• Dimensions: 139(W) x 149(H) x 45(D)mm

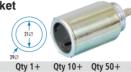
Fuse: 5A



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	PP-1990	\$16.95	\$14.95	\$13.35

CIGARETTE LIGHTER SOCKETS

Cigarette Lighter **Chassis Socket**





PS-2002



7	Cat.	Qty 1+	Qty 10+	Qty 50+
	PS-2003	\$3.95	\$3.45	\$3.15

ADAPTORS & LEADS

Cigarette Lighter Twin Socket

Allows you to run two 12V appliances from the one socket

LED indicator.



~	cat.	Qty I+	Qty 3+	Qty 6+
	PP-2005	\$9.95	\$8.75	\$7.75

Cigarette Lighter Double Adaptor

Incorporates a lighter plug and two inline sockets



150mm cable

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	PP-2006	\$9.95	\$8.75	\$7.75

Cigarette Lighter Extension Cord

Cigarette lighter extension cord with dust cover. Extend the range of your cigarette lighter devices.

Cable Length: 3m • Fuse:



7	Cat.	Qty 1+	Qty 3+	Qty 6+	
	PP-1992	\$12.95	\$11.35	\$10.35	

Car Lighter Socket To Battery Clips

This lead simply clips onto car battery terminals and has a cigarette lighter socket on the other end.

• Cable length 400mm



7	Cat.	Qty 1+	Qty 10+	Qty 50+
	PP-2007	\$9.95	\$8.75	\$7.75

Under Dash Cigarette Lighter Socket With Protective Cap

This socket can be mounted under a car or boat dash and features a hinged cap with protective gasket. A convenient way of providing 12V on tap.

- · Heavy duty auto cable pre-attached
 • 450mm length

7 Cat. \$11.35 \$10.35

Under Dash Double Cigarette Lighter Socket

A dual socket mounted on a steel frame which in turn mounts under the dashboard. Heavy duty auto cable is included with in-line fuse holder and terminated with a bullet and Y connector.



- Lead length 300mm
- Self tapping mounting screws included

Qty 10+ Qty 50+ PS-2009 \$12.95 \$11.35

12VDC Cigarette Lighter Socket 3 Way Splitter with USB

This device converts one 12V socket into three to power all the gadgets you need as you drive, including a GPS and phone chargers. The body rotates to the most convenient angle, and a USB port provides 5VDC power to power USB gadgets, including an iPhone®. Three built-in LEDs also indicate

- the status of your vehicles battery voltage. • 12VDC adjustable plug • 3 x 12VDC outputs
- 1 x 5VDC 500mA USB port Dimensions: 115(L) x 111(W) x 32(H)mm

Qty 10+ Qty 50+ PS-2124 \$14.95 \$13.35

12VDC Car Cigarette Lighter Socket 4 Way Splitter with USB Port

This socket splitter enables you to power up to four 12VDC plug appliances at once. Plus it features a USB port to charge your iPhone® or other USB gadget. Comes with a detachable mounting base

so you can mount this unit horizontally or vertically on your dash or centre console, and detach it for flexible use.

- 12VDC plug with 1.2m lead
- 4 x 12VDC socket outputs
- 1 x 5VDC 1A USB port
- 10A max

PS-2019 \$19.95 \$17.70 \$15.70

Car Cigarette Lighter Socket with Lid

A handy additional power socket for charging devices in your car. This weatherproof 12V car cigarette lighter socket can be flush mounted and has a springloaded lid to keep it free of dust and debris

· Perfect for caravan, marine, 4WD or other harsher than normal applications.

Qty 4+ PS-2015 \$14.95 \$13.35

Weatherproof Cigarette Lighter Socket - 15A

Suitable for marine, caravan, 4WD, camping or anywhere you need 12V power. Protected from the elements by a spring-loaded sealed cover and fully sealed electrical connection.

- Panel mounting. 32mm mounting hole
- Flylead termination.
- Cat. PS-2011 \$13.35 \$11.70

HIGH CURRENT CONNECTORS

Used widely in both domestic and industry, you'll find these connectors in many 4WD, boating, automotive and other industry applications. Supplied individually with a pair of contacts, all 5 current ratings have an operating temperature of -20° to $+120^{\circ}$ C.

Individual Nesting

They are genderless which means that there is no separate plug and socket and can be easily stacked to



Specifications	PT-4405	PT-4407
Contact Rating	30A (max. 45A)	75A
Voltage	600V (AC or DC)	600 (AC or DC)
Contact Wire Size	1.63mm - 2.59mm	
	(#10-#14 AWG)	(#6 - #16AWG)
Max Wire Insulation Dia	4.4mm	1.3 - 13.3mm
Contact Retention Force	9kgs (20lbs)	22kgs (50lbs)
Operating Temperature	-40 to +125°C	-40 to +125°C

7	Cat.	Qty 1+	Qty 10+	Qty 50+
30A	PT-4405	\$4.95	\$4.45	\$3.90
75A	PT-4407	\$11.95	\$10.70	\$9.50

Moulded Pair

Used widely in both domestic and industry, you'll find this connector in many 4WD applications, boating, automotive and other industries. Supplied as a moulded 2 pole with contacts.



Specifications	PT-4420	PT-4422	PT-4424
Contact Rating	50A	120A	175A
Contact Wire Size	13.3mm2	3.6mm2	53.5mm2
	(#6 AWG)	(#2 AWG)	(#1/0 AWG)
Voltage Rating	600V	600V	600V
	(AC or DC)	(AC or DC)	(AC or DC)
Max Wire Insulation Diameter	11mm	14.6mm	19mm
Contact Retention	22kg	45.5kg	137kg
Force		(100lbs)	(300lbs)
Operating	-20 to	-20 to	-20 to
Temperature	+120°C	+125°C	+125°C
Anderson Part No.	SB50-6319	B120-6800G1	SB175-6325G1

7		Qty 1+	Qty 10+	Qty 50+
50A	PT-4420	\$9.95	\$8.75	\$7.75
120A	PT-4422	\$19.95	\$17.70	\$15.70
175A	PT-4424	\$29.95	\$26.90	\$23.70

Dust/Water Resistant Rubber Covers

rubber cover to suit our



Suits	Cat.	Qty 1+	Qty 10+	Qty 50+
PT-4424	PM-4430	\$14.95	\$13.35	\$12.70
PT-4420	PM-4434	\$14.95	\$13.35	\$12.70

Dustcover for 120A Anderson Connectors

Rubber water and dust resistant cover for our 120A Anderson connector PM-4422.				Q		
	Suits	Cat.	Qty 1+	Qty 10+	Qty 50+	
	PT-4422	PM-4432	\$14.95	\$13.35	\$12.70	

PM-4430

PM-4434

Handles for Anderson Connectors

Facilitates easy connection/ disconnection. Ensures a secure grip, even with gloved hands for easier charging of electric forklifts etc.

Suits Anderson Connecto 50A Cat PT-4420 120A Cat. PT-4422 Cat PM-4436 Cat PM-4438 175A Cat. PT-4424 Cat PM-4439

Suits	Cat.	Qty 1+	Qty 10+	Qty 50+
PT-4420	PM-4436	\$7.95	\$6.95	\$6.75
PT-4422	PM-4438	\$7.95	\$6.95	\$6.75
PT-4424	PM-4439	\$12.95	\$11.35	\$10.95

4mm Banana Socket to Alligator Clip

Available in black or red



7	Cat.	Qty 1+	Qty 10+	Qty 50+
Red	PA-3668	\$2.75	\$2.45	\$2.15
Black	PA-3669	\$2.75	\$2.45	\$2.15

CATIII Rated Banana Alligator Clip

Takes standard and fully insulated 4mm banana plugs and turns them into an alligator clip. CATIII rated

• Sold as a pair, red and black

7	Cat.	Qty 1+	Qty 10+	Qty 50+
	PA-3696	\$9.95	\$8.75	\$7.75

Alligator Clips

SMALL - 26mm 1 x Red & 1 x Black Qty 10+

Pair	HIVI-3020	\$1.50	\$1.35	\$1.20
MEDIUI	M - 32mm			
1 x Red	l & 1 x Black	Otv 1+	Qty 10+	Otv 50+

Alligator Clips With Screw

No soldering required. Large alligator clips with plastic finger grips and a screw for connection

• Length 55mm

 Max jaw opening 12mm Sold as a pair or singly



Jumper Lead Kits

HEAVY DUTY

This kit has large alligator clips and heavy cable. The alligator clips are approximately 50mm long, and have iaw openings of about 10mm

Cable length is approx 300mm 10 leads supplied,
 2 of each colour.



STANDARD

Ideal for connecting devices for testing. Alligator clip size is approx 40mm, jaw opening is about 8mm and cable length is approx 400mm.

• 10 leads supplied 2 of each colour.

HEAVY DUTY	Qty 1+	Qty 10+	Qty 50+
WC-6020	\$11.95	\$10.70	\$9.50
STANDARD			
WC-6010	\$6.95	\$6.25	\$5.35

Car Battery Type Clips

All have insulated colour coded handles.



These are very large and very strong. You can not put your finger in the end, because it will probably give you a bite! These are ideal for

our 300W and 500W inverters.



15 AMI	P Length 55mm.	Max jaw	opening 14	mm
1 x Rec	l & 1 x Black	Qty 1+	Qty 10+	Qty 50+
Pair	HM-3010	\$3.50	\$3.15	\$2.75

30 AM	IP Length 70	mm. Max jaw	opening 2	0mm
1 x Red	d & 1 x Black	Qty 1+	Qty 10+	Qty 50+
Pair	HM-3012	\$3.95	\$3.45	\$3.15

50 AN	MP Length 98mr	n. Max jaw	opening 2	5mm
1 x Re	ed & 1 x Black	Qty 1+	Qty 10+	Qty 50+
Pair	HM-3015	\$5.50	\$4.90	\$4.30

200 Amp Length 130mm. Max jaw opening 35mm

7		Qty 1+	Qty 10+	Qty 50+
Pair	HM-3060	\$9.95	\$8.75	\$7.75

400 Amp Length 155mm. Max jaw opening 22mm

7		Qty 1+	Qty 10+	Qty 50+
Pair	HM-3085	\$15.95	\$14.35	\$12.70

400 Amp Stainless Steel **Battery Clamps**

Rated at 400 amps this pair of heavy duty battery clamps are ideal for making up jumper leads and for use with our inverters. All metal parts are made from 316 marine grade stainless steel, they can be taken

and used anywhere without the

- risk of corrosion. Sold per pair
- Current rating: 400 amps
 Length 165mm
- Max jaw opening 50mm 316 Grade (marine grade) stainless steel

7	Cat.	Qty 1+	Qty 10+	Qty 50
	HW-3086	¢12.05	¢11 25	\$10.35

Waterproof Cable **Connector Housing**

electrical cables and provide a robust and waterproof connection



This housing will also accomodate any connector which is sized within the internal dimensions of the housing. Note: cable not included.

Specifications				
Operating Temp	-20°C to +7	75°C		
Ingress Protection	IP68			
Voltage Rating	250V (for included terminal block)			
Current Rating	16A max (fo	or included te	rminal block)	
Accepted Cable Types	Circular she	ath with 6 - 1	0mm dia	
♂ Cat.	Qty 1+	Qty 10+	Qty 50+	
PS-4068	\$29.95	\$26.90	\$25.45	

If you are reading this page you may have application for high-current wiring. For suitable heavy-duty cable check out pages 207 for cable down to "0" gauge. You might also find the automotive cabling hardware and fuses on page 424 interesting.

Freecall order hotline: 1800 022 888

CAR ALARMS

Steelmate Entry Level Car Alarm with Voice Function

An affordable car alarm that features voice feedback on alarm status and operational parameters such open doors etc.

- What you get:
 Electronic black box controller
- Shock sensor, Ignition cutout relay
 Speaker siren
- Wiring looms
- Bonnet pin switch
 Car charger for the remote controls
- Extra circuits for fuel and ignition cutout 2 x Code hopping remote control
- units, one with a built in torch!

Kit includes:

- Metallic water resistant 5-button transmitters
- Dedicated boot release button
- Voice warning (ON / OFF) Valet mode
- Anti-hijacking, emergency call & locating
- Emergency override





		LEFR WREARTY	(
y 1+	Qty 2+	Qty 4+	
9.00	\$88.95	\$78.95	

7	Cat.	Qty 1+	Qty 2+	Qty 4+
Car Alarm	LA-9003	\$99.00	\$88.95	\$78.95
Spare Remote	LA-9004	\$37.95	\$33.95	\$30.45
Spare Remote Car Charger NEW	LA-9021	\$9.95	\$8.75	\$7.75

Steelmate Advanced Car Alarm with Pin Code Function

A full featured car alarm at a bargain price. It features code hopping remotes with PIN codes so that a would-be thief can't get into your car even if they have the remote. Also included is a two stage shock sensor, door and boot trigger and a 125dB siren and a microwave movement sensor.

- Here's what you get.
 Electronic black box controller.
- Two stage shock sensor. Microwave movement sensor
- Ignition cutout relay.
- Battery backup siren.
- Wiring looms.
- · Bonnet pin switch
- Car charger for the remote controls.
- · Extra circuits for fuel and ignition cutout
- 2 x Code hopping remote control units

7		Cat.	Qty 1+	Qty 2+	Qty 4+
	Car Alarm	LA-9008	\$99.00	\$88.95	\$78.95
	Spare Remote	LA-9009	\$39.95	\$35.90	\$31.90
	Spare Remote Car Charger NEW	LA-9021	\$9.95	\$8.75	\$7.75



3 Point Engine Immobilising Car Alarm

AUSTRALIA / NEW ZEALAND STANDARDS APPROVED

This high quality fully featured engine immobilising car alarm is made to and has passed the latest 2001 Australian and New Zealand Standards AS/NZS 4601:1999 - Vehicle Immobilisers. Some insurance companies will offer a discount on your policy if you have a standards approved immobiliser fitted to your vehicle, and in the case of high performance or imported cars you may be required to have one fitted as a condition of your policy. Most insurers require, as a minimum, an Australian Standards approved (AS/NZS

LA-8970, WHAT YOU GET:

- Black box electronic module with all of the above features, made to Australian and New Zealand Standards
- 2x 433MHz code-hopping remote control key fobs
 High security all-black wiring harness (numbered for installation purposes), including central locking output wiring
- Flashing dashboard LED
- Installation and user manuals
- Now includes relay to give third immobilisation circuit
 Purchase Cat LR-8830 for 4 door and Cat LR-8838 for 2 door to add central locking to your car.

- LA-8975, WHAT YOU GET:
 Multi-Tone 20 watt Battery Back-Up Siren with security key shut-off
- Shock Sensor (adjustable sensitivity settings)
 Bonnet Pin Switch (protects engine bay from tamper)
- Supplementary Installation booklet





Recognised by



4601:1999) Immobiliser with a minimum of two immobilising points, and some of the more specialised insurers require 3 immobilisation points. The

Shadow meets and exceeds these insurers' requirements by having the required standard two internal immobilising circuits as well as a third external immobilising circuit. The Shadow is sold with the alarm components separately (LA-8975), allowing the user to save costs if they do not require

> TECH TIP **Turbo Timer Friendly Central Locking Logic!**

7		Cat.	Qty 1+	Qty 2+	Qty 4+
	Immobiliser with 2 Remotes	LA-8970	\$139.00	\$124.95	\$110.95
	Spare Remote	LA-8972	\$29.95	\$26.90	\$23.70
	Upgrade Pack	LA-8975	\$49.95	\$44.90	\$39.90



Car Alarms

GPS/GSM Tracking Device

A GSM and GPS Tracking solution to locate and track the whereabouts of your vehicle in real time via the Internet on a computer or Smartphone. The device is easy to install with only 2 - 4 wires to connect. Insert a GSM Sim card (not included) and hide the device away on a metal surface or carpet using the included Velcro adhesive. It works by sending the vehicle's GPS coordinates via the GSM network to the free online tracking service, which shows the location on Google Maps. It can also SMS longitude and latitude coordinates to up to 3 mobile phones, as well as alerts when vehicle exits a pre-determined area or exceeds pre-set speed.

Other features include an engine kill function to remotely disable the petrol pump, and movement sensor to extend battery life. An SOS/Panic button is also supplied which can send an SMS to the pre-programmed mobile phones. The built-in rechargeable Li-ion battery will keep the device functioning for up to 4 days when power is disconnected, which could help you locate the vehicle should it have been stolen and abandoned

There is no installation or on-going tracking charges. You only pay for the GSM sim card and service. Supplied with wiring loom, installation and operation manual

• Real time upload current location to website

- Turn off car engine by Internet platform or SMS for Anti-theft
- ListeningNo platfo
- SIMCOM
- Upload in
- Built in sh
- · Shock sen
- Website s
- Platform (
- Send alert
- Send alert
- Power sup

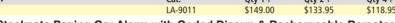
sound around tracker with silence		GSM Frequency		850/900/180	00/1900 MHz	
orm Service charge (Our free trackir	ig platform)	GSM & GPS Ante	enna	Built-in		
GSM module (Quad band)		GPS Channels		32		
nterval is 30 seconds according the		Locate Accuracy		5-10m		
hock sensor to control GPS on off t		GPS Start Time		1sec (Hot sta	art), 36sec (Cold start	t)
nsor can be used as car shock & m	ovement alarm	Standby current Tracking current		1 - 2mA		
shows history tracking uses free Google Maps				35mA		
rt when vehicle exits a restricted ar	202	Operating voltag	je	12 - 32VDC		
rt when vehicle exceeds the restrict		Charge voltage		5V		
ipply disconnect alarm	ieu speeu	Battery		800mAh Li-i		
ippiy disconnect alann		Unit dimensions		68(L) x 48(W	/) x 20(D)mm	
	C-4	044	042	044		
	Cat.	Qty 1+	Qty 2+	Qty 4+		
	I A-9011	\$149.00	\$133.95	\$118.95		

Specifications

Normal operating temperature

security keys (supplied).

-20 to +55°C



Steelmate Paging Car Alarm with Coded Disarm & Rechargeable Remotes

It is an unfortunate fact that many car thefts these days involve the thief obtaining the keys to the vehicle; this system has been designed to minimise that risk by incorporating a coded disarm feature. When enabled, it will allow the owner to select a 1 - 5 digit pin code that is entered via the remote control and is required to disarm the system. Like our previous systems, this unit also includes two way paging with rechargeable remote controls. The alarm includes long range back-lit LCD paging remote control with integrated rechargeable lithium-ion batteries inside, vibrating motors for when the alarm is triggered and an alarm clock!

Specifications Voltage Standby current 5mA 433.92 MHz

Main Features:

- Coded disarm function keeps your vehicle secure even if thieves have the keys.
- · Metallic water resistant LCD transmitters with lithium battery
- FSK technology, range up to 3000m
- Valet mode
- Out of operating range warning
- Separate trunk release button
- Comfort closure
- Active arming & passive arming selectable
 Clock setting & alarm setting with sound & vibration in transmitters
- · Dome light delay arming





A 12V cigarette plug charger is provided to keep your remotes topped up while on the go. The alarm system also utilises FSK technology and will relay the status of your vehicle to the key fob of up to 3 kilometres away (direct line

of sight). An adjustable 2 - stage shock sensor and microwave sensor siren are supplied with the system to ensure maximum protection of your valuable

assets. The included battery back up siren will give continuous sound output even if the wires are tampered or cut off and can only be turned off with the

7		Cat.	Qty 1+	Qty 2+	Qty 4+	
	Car Alarm	LA-9016	\$249.00	\$225.00	\$198.95	
	Spare Remote	LA-9017	\$79.00	\$70.95	\$62.95	
	Spare Remote Car Charger	LA-9021	\$9.95	\$8.75	\$7.75	



TAMPER SWITCHES

Tamper (Pin) Style

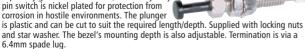
Low cost spring loaded switch, simply make to frame (or earth) when pin is released i.e. by operating car or cabinet door, etc. 57mm overall, 12mm pin travel.

Bullet connector termination

7	Cat.	Qty 1+	Qty 4+	Qty 8+
Pkt 2	LE-8775	\$5.95	\$5.25	\$4.75

Metal Tamper (Pin) Style

Especially good for car bonnets, this heavy duty



Specifications			
Length (main body)	38mm	Including plug & lug	70mm
Shaft diameter	7.75mm	Fascia nut size	11mm
Locking nut size	12mm	Travel (max)	13.5mm.

7	Cat.	Qty 1+	Qty 2+	Qty 4+
Pkt 2	LE-8776	\$7.95	\$6.95	\$6.25

Freecall order hotline: 1800 022 888

Metal Fascia Inset Pin Switch

Inset pin switch with plated metal fascia. Suitable for many cars as a replacement door switch. The sturdy plunger can be cut to required length. Termination via right angle 6.4mm spade lug.

Specifications			-	market a	
Fascia	34.5 x 16.5mm				
Pin	27(L) x 8(dia)mm				200
Depth behind fascia	15mm (not inc lug 8	k pin)		100	W 191
Overall depth	51mm				
Travel (max)	8mm				
7		Cat.	Qty 1+	Qty 2+	Qty 4+
Pkt 2		LE-8777	\$7.95	\$6.95	\$6.25

Van Sliding Door Style

Double action sliding door switch, primarily designed for van doors and tailgates. Supplied with rubber mounting plates, screws, template stickers and installation instructions. Contacts are rated at a massive 20A @ 12V.



7	I	Cat.	Qty 1+	Qty 2+	Qty 4+
	12VDC 20A	LE-8779	\$18.95	\$16.95	\$14.95

Otv 4+

SECURITY ACCESSORIES

Remote Controlled Car Central Locking System Upgrade to a remote keyless car entry with this system. On rainy or windy days where you need a quick entry, unlock your doors as you approach the car. The system is easy to install with 2 keyfob and comes with two remote keyfobs.

SPARE REMOTE CONTROL

Spare Remote Control for LR-8839 Central Locking System. Supplied with one 12V battery (For replacement batteries use our SB-2422.)

7		Cat.	Qty 1+	Qty 2+	Qty 4+
	Central Locking System	LR-8839	\$49.95	\$44.90	\$39.90
	Spare Remote	LR-8837	\$19.95	\$17.70	\$15.70

2 Door Power Lock Kit

Add the convenience of central locking to your car with this low cost 2 door central locking kit. The system can be installed by the average handy person in just a couple of hours.

Supplied with 1 master, 1 slave actuator, control relay, hardware and wiring loom.

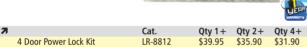


1		Cat.	Qty 1+	Qty 2+	(
	2 Door Power Lock Kit	LR-8810	\$29.95	\$26.90	\$

4 Door Power Lock Kit

Add that touch of luxury to your car with this low cost 4 door central locking kit, so when you unlock the drivers door the other three doors will also unlock. It can be connected to car alarms with a negative triggering locking output, or used with our LR-8839 remote controller for keyless entry

 Supplied with 1 master, 3 slave actuators, control relay, hardware and wiring loom.



Slave Door Lock Actuator

Door lock actuator used on passenger doors. Durable, waterproof and dustproof with Japanese mechanics, and supplied with universal mounting hardware. Wiring not included.

- · Japanese Mabuchi motor
- Original Nylon and POM
- PTC overload protection
 Life cycle: 100,000 times
- Push/Pull force: > 4.0 kg
 Input voltage: 9 16VDC

71	Cat.	Qty 1+	Qty 2+	Qty 4+
	I R-8813	\$12.95	\$11.35	\$10.35



Master Door Lock Actuator	_
Door lock actuator for Driver's door. Includes microswitch output to activate power lock relay LR-8818. Durable, waterproof and dustproof	IEU
with Japanese mechanics. Supplied with universal mounting	5015

hardware. Wiring not included.

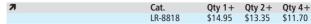
- Japanese Mabuchi motor
- Original Nylon and POMPTC overload protection
- Life cycle: 100,000 times
 Push/Pull force: > 4.0 kg
 Input voltage: 9 16VDC



Power Lock Relay

To operate any of the door lock actuators you will need this relay. Suitable for key operation of door locks and remote control operation





4 Door Remote Controlled Central Locking Kit with Kill Switch

Lock and Unlock your car doors from a distance without having to fumble around with keys. Includes outputs to flash the indicators for visual confirmation,



• Working voltage: 9 - 16VDC • Frequency: 433.92MHz

7	Cat.	Qty 1+	Qty 2+
	LR-8842	\$79.95	\$71.95

Car Boot / Hatch Release

This great little gadget installs on your boot or hatch lock so that unlocking simply involves pressing a button (supplied)! Solenoid comes with mounting bracket, wiring loom (fuse included), dash mount pushbutton switch and installation instructions.

· Solenoid Unit (including bracket): 95(L) x 43(D) x 58(H)mm Switch (on L bracket):

50 (H) x 44(W) x 40(D)mm

71	Cat.	Qty 1+	Qty 2+	Qty 4+
	LR-8834	\$39.95	\$35.90	\$31.90

Installing a Car Alarm or Immobiliser Booklet

Cars and their contents are prime targets for thieves - so protecting your vehicle with a suitable alarm and/or immobiliser makes a lot of sense. Topics explained include (but not limited to) high current wiring, code hopping, battery backup, preventing false alarms and sensing devices. A special glossary page is included to explain the various terms you are likely to come across when investigating the purchase, or installation, of an automotive security device.

• A4 8 pages.

7	Cat.	Qty 1+
	BI-8208	\$2.00

ALARM STICKERS

Large Alarm Sticker

For trucks, caravans, houses, offices and factories. Where a larger and more prominent deterrent sticker is required.

- Sticks to outside of window
- Dimensions: 120 x 80mm



RELATED PRODUCT

For other General Stickers see page 480

7	Cat.	Qty 1+	Qty 4+	Qty 8+
Each	LA-5102	\$2.95	\$2.60	\$2.30

Key Fob Learning Remote 250 - 450MHz

A wider frequency range that includes some automatic garage door openers. Will learn up to 4 different codes and make your life a little easier by letting you control all your alarms with just one fob. A typical situation could be using the same remote for your car, your partner's car and the automatic garage door with a spare button for the house alarm when you get it. Frequency: 250MHz to 450MHz.

Not suitable for code hopping alarms





7	Cat.	Qty 1+	Qty 2+	Qty 4+
	LA-8992	\$45.00	\$40.45	\$35.95

Single Channel Keyfob Remote

Multi-purpose remote control keyfob for garage doors, lights, automatic gates etc. It operates in the 27MHz band on an FM signal. The built-in microcontroller uses the latest technology allowing for easy setup and installation while providing maximum security and reliability

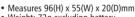
- Battery status LEDUp to 200m range



7	Cat.	Qty 1+	Qty 4+	Qty 8+
	LR-8847	\$49.95	\$44.90	\$39.90

One Channel Hand Controller/Transmitter

For over 15 years now, one brand of remote control has dominated the Australian & New Zealand markets for remote controls for garage doors, motorised gates, lighting, alarms etc. This unit, called the FMT 101, 102 or 103, is a 27MHz crystal controlled NBFM (Narrow band frequency modulated) device. It is coded with a 12-way DIP switch. There are over a million in service in Australasia. They are very reliable but they do wear out, drown, go walkabout or simply get lost.We now stock the most popular single channel unit. This will save ordering one through the garage door people who charge a fortune for replacements. This is the latest version of the most common operating transmitter in use in Australia/New Zealand today. It operates (always has) on 27.145MHz & requires a 216-type 9V cell. An alkaline battery is recommended but is not included. The controller is custom coded via a DIP-switch which is accessible from the battery cover.



Weight: 72g excluding battery





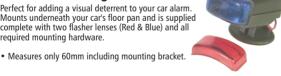
1	Cat.	Qty 1+	Qty 4+	Qty 8
	LR-8827	\$49.95	\$44.90	\$39.9

STROBES

12V Auto Strobe Light

Perfect for adding a visual deterrent to your car alarm. Mounts underneath your car's floor pan and is supplied complete with two flasher lenses (Red & Blue) and all required mounting hardware.





Qty 1+ Qty 2+ ST-3150 \$6.25

"Strobe" LED with Magnetic Base

The blue-light disco is back! This portable 'police' strobe light can be placed on any iron/steel surface and it will stay there - put them on the fridge or filing cabinet, hang them from the ceiling and you've got yourself an instant disco. Also great for attracting attention to sale items in a shopfront window. Battery operated (3 x AAA), with a socket for adaptor use (requires a 4.5VDC 200mA adaptor - not included). Available in red, blue or amber.



Not a Xenon type strobe

7	Cat.	Qty 1+	Qty 2+	Qty 4+
Red	SL-3325	\$19.95	\$17.70	\$15.70
Blue	SL-3327	\$19.95	\$17.70	\$15.70
Amber	SL-3329	\$19.95	\$17.70	\$15.70

Waterproof LED Strobe Lights

LED strobes for security, alarm or emergency use. Low current consumption units are fully sealed and waterproof; suitable for outdoor alarm applications. Mounts with 2 x 5mm bolts

12VDC operation

• Measures: 70(Dia) x 45(H)mm

Blue Cat. LA-5326 Red Cat I A-5327 Amber Cat. LA-5328



	_				
7	Colour	Cat.	Qty 1+	Qty 4+	Qty 8+
	Blue	LA-5326	\$19.95	\$17.70	\$15.70
	Red	LA-5327	\$19.95	\$17.70	\$15.70
	Amber	LA-5328	\$19.95	\$17.70	\$15.70

Revolving Signal Emergency Light

This revolving emergency signal light means business. The super bright halogen bulb can be seen for miles and it has a heavy duty magnetic base to attach to any metallic surface. The low noise motor creates no interference to radios/CBs, etc and the low friction belt drive means there is no mechanical noise - no clicking or squeaking. The tough PVC casing is weather resistant making this unit suitable for automobiles, marine vehicles and boats, trucks, or most emergency situations.



Power supply: 12V cigarette lighter plug

· Current draw: 4 amp

7	Cat.	Qty 1+	Qty 2+	Qty 4+
	ST-3296	\$29.95	\$26.90	\$23.70

SIRENS

Electronic Siren

Small sized siren. It's much easier to mount a small siren in a cramped engine bay!

Specifications	
Operating voltage	12V DC
Sound output	125dB.
Power rating	20 watts
Current draw	1.3 Amp.
Size	67(L) x 59(W) x 70(H)mm including brackets.
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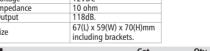


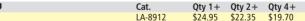
Six-Tone Car Alarm Siren with Back-Up Battery

This compact siren has a rechargeable back-up battery pack mounted inside the unit, so if the wires are cut by a thief, the siren will sound & the only way to disable the unit is to turn it off with a key. Internal batteries are kept on trickle charge so they are always fully charged.

Supplied with 2 kevs

c ::: ::	,
Specifications	
Power	20W
Voltage	12VDC
Impedance	10 ohm
Output	118dB.
Size	67(L) x 59(W) x 70(H)mm including brackets.





DID YOU KNOW...

Gustave Trouvé (1839-1902) and Karl Benz (1844-1929)

In 1881, Gustave Trouvé not only designed and invented the first ever car powered by electricity but also demonstrated the functioning of this automobile at an International Exhibition of

Electricity in Paris. Four years later in 1885, Karl Benz designed and built a car powered by gasoline. He also invented the first ever car with an internal combustion flat engine in 1896.

Lighting & Home Automation

Since we launched this section last year there have been a number of significant additions. LED downlights have (of course!) been getting progressively cheaper & better along with LED strip lighting.

Noteworthy is a new dimmable 10 watt LED driver - clever!





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ENERGY SAVING LIGHTING

Developments in LED lighting have been dramatic, at first they struggled to compare with Halogens & Fluoros for light output. That problem has now been eliminated. You would be crazy to seriously use Fluoro or Halogen illumination for almost any lighting application. Indeed building codes will shortly demand it.

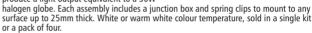


Ecolume installation in metropolitan Sydney

ecolume

GU10 LED Mains Voltage Downlight Kits

Simply cut a hole and drop them in, or replace your existing halogen downlights. Mains powered, so no additional power supplies, transformers or ballasts required, just get your electrician to wire them straight in to 240VAC. Being LED rather than halogen, they use 1/10th the power, last over 50,000 hours, or over 20 years if run for 6 hours per day! The GU10 LED lamps supplied with each kit feature three Cree XP-G LEDs, running at 2W each to produce a light output equivalent to a 30W



- Cut-out: 90mm
- Light output: White 450 lumens, warm white 350 lumens
- Dimmable (with regular trailing or leading edge dimmers)



CREE

7				Cat.	Qty 1+	Qty 3+	Qty 6+
	3 x 2W	White	1 Pack	ST-3896	\$54.95	\$49.45	\$43.90
	3 x 2W	Warm White	1 Pack	ST-3897	\$54.95	\$49.45	\$43.90
	3 x 2W	White	4 Pack	ST-3898	\$179.00	\$160.95	\$142.95
	3 x 2W	Warm White	4 Pack	ST-3899	\$179.00	\$160.95	\$142.95

LED DOWNLIGHT KITS

Ecolume 9W Downlight Kit

With the ever increasing cost of electricity bills, more and more people are looking to alternative lighting solutions; and LED technology is presenting a viable and popular alternative to halogen or CFL lighting sources. This latest offering in the Ecolume lighting range represents the latest and greatest in LED technology and performance, consuming a meagre 9W of power whilst producing almost 700 lumens of light thank to the few Philips Lumileds.

consuming a meagre 9W of power whilst producing almost 700 lumens of light thanks to the four Philips-Lumileds Luxeon Rebel ES LEDs. That's virtually as much light as a 50W halogen downlight! Being LED, the downlight operates at significantly lower temperature than halogens, with no UV output, and LED output is rated to over 50,000 hours of service. Truly a quality product with outstanding performance. Kit is supplied with dimmable LED driver (leading and trailing edge dimming).

Two models available: **ECOLUME-LITE 9W - WARM WHITE** Cat. ZD-0355

ECOLUME-LITE 9W - NEUTRAL WHITE Cat. ZD-0357



Specifcations	ZD-0355	ZD-0357
Housing	Gimbal	Gimbal
Colour	Warm White	Neutral White
Colour Temp.	3000K	4000K
Beam Angle	38°	38°
Lumen output	686	687
Ceiling cutout	83-90mm	83-90mm



Ecolume kitchen installation

7		Cat.	Qty 1+	Qty 3+	Qty 6+
9W	Warm White	ZD-0355	\$79.95	\$71.95	\$63.95
9W	Neutral White	ZD-0357	\$79.95	\$71.95	\$63.95

Ecolume 15W Downlight Kits

Lighting our way to a more energy efficient future are the new 15W Ecolume LED downlight kits. A more energy efficient solution to halogen or CFL downlights, these 100mm LED downlights are powered by six OSRAM UX3 LEDs, featuring the latest in efficient LED technology from Osram. The result is a phenominally bright light output; even higher than a 50W halogen, with over 900 lumens of light produced! Besides the significant power savings (over 75%!) we should also highlight that being LED, the 15W Ecolume downlights operate at significantly lower temperatures with no ultraviolet a carbon emissions and will provide 50 000 hours plus the same carbon emissions and will provide 50 000 hours plus the

significantly lower temperatures with no ultraviolet and carbon emissions, and will provide 50,000 hours plus of service life. Each downlight kit is supplied with a dimmable LED driver and the adjustable gimbal housing finished in white colour. Truly a high quality product with outstanding performance, we are giving these a 3 year replacement warranty.

Two models available:

Specifications	ZD-0373	ZD-0376
Housing	Gimbal	Gimbal
Colour	Warm White	Neutral White
Colour Temp.	3000K	4000K
Beam Angle	50°	50°
Lumen output	906	966
Equivalent halogen light	60W	65W
Ceiling cutout	83-90mm	83-90mm



		Cat.	Qty 1+	Qty 3+	Qty 6+	
15W	Warm White	ZD-0373	\$99.00	\$88.95	\$78.95	
15W	Neutral White	ZD-0376	\$99.95	\$89.95	\$79.95	

7

LED Replacement Lamps & Transformers

CREE

7D-0370

ZD-0372

MR16 CREE® XR-E LED Downlight Kits

These LED downlight kits offer a complete LED downlight solution, as they are a complete unit integrated into a gimbal housing and supplied with a 240VAC power supply. Utilising the same CREE® XR-E LEDs as used in our popular MR16 halogen replacement lamps, they offer market-leading efficiency and light output, with over 110 lumens from the smaller ZD-0370 and over a huge 400 lumens from the ZD-0372 - that is almost equivalent to a 50W halogen downlight but at just 10% of the power consumption! Both units are fitted flush mount to your ceiling with spring holder just like a regular MR16 downlight fitting, and offer angle adjustment to direct the light beam for desired effect. Life expectancy is over 50,000 hours - or over 15 years of normal use

An excellent choice for homes powered by alternative energy sources, or for any application where power consumption and life expectancy are critical. Power supply included.

Specifications:	ZD-0370	ZD-0372
Power	3W	4.3W
LED type	CREE® XRE	CREE® XRE
Brightness	110 - 130 lm	400 - 450 lm
Colour	White	White
Colour temp.	5500k	5500k
Input voltage	100 - 240VAC	100 - 240VAC
Lens angle	45°	45°
Dimensions	60 x 45mm	90 x 110mm
Cutout	45mm	77mm



Green Lighting

Reduce your impact on the environment and save money in the process with the ultimate guide for DIY energy efficient lighting. It shows anyone using residential or commercial lighting how to implement upgrades to reduce energy costs while maintaining or even improving the quality of the lighting. Green Lighting includes methods for calculating payback and return on investment, and a complete source for energy-efficient products available





ELECTRONIC TRANSFORMERS

Electronic Transformers for LED Lights

Electronic transformers that are intended for use with halogen downlights are not suitable for use with LED-replacement lighting products, since using them often causes flickering and dramatically reduces the life expectancy of the LED light. These electronic transformers are designed to be used with LED lighting products that take a 12V power source, for example our LED MR16 replacement globes, and provide the same kind of efficient power delivery and compact size as a normal electronic transformer. They deliver a

constant 12VDC and feature short circuit, over temperature, over load and spike protection. Suitable for domestic and commercial applications, they are perfect for combining with our LED MR16 globes to replace those power-hungry halogen downlights. Two models available:

7	Cat.	Qty 1+	Qty 3+	Qty 6+
10 Watt	MP-3360	\$19.95	\$17.70	\$15.70
25 Watt	MP-3362	\$24.95	\$22.35	\$19.70

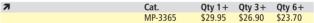
Dimmable Constant Current LED Driver 10W 700mA

This is the same high quality constant current, dimmable, LED driver we use in our 9W Ecolume LED downlight kits. A compact mains powered unit, capable of driving 1-4 high power LEDs at a constant current of 700mA (10W max), whilst also being dimmable

with a standard leading or trailing edge triac dimmer: it is an excellent driver for domestic LED lighting projects or as a replacement for a failed LED driver. Also features overload and short circuit protection. and carries full electrical safety approval

- Overload & short circuit protection
- · Dimmable with leading edge or trailing edge

Specifications	
Input voltage	220-240VAC, 50/60Hz
Power factor	0.90
Output voltage (no load)	14VDC
Constant current output	700mA (max), 50-690mA (dimming range)
Electrical safety approval	A/12244EA
Dimensions	112(L) x 40(W) x 25(H)mm



ECO-LIGHTING LED REPLACEMENT LAMPS

LED downlights have a lot of benefits over their traditional halogen counterparts, the biggest of which are their significantly lower power consumption (around 90% less), longer life expectancy (50,000 vs 2,000 hours) and significantly lower heat generation. Installation is generally as easy as replacing a globe. See our website for full details and specifications.

CREE® XR-E LED Lamps



There are a lot of reasons to replace standard halogen downlights with an LED equivalent, the biggest of which is the power consumption. Many people assume that because halogen downlights are "low voltage", that means low power - wrong! Most

Freecall order hotline: 1800 022 888

are 50W each, and when you have several downlights lighting up each room in

your house, that adds up to a very scary power bill.

An LED equivalent typically uses 3-7W of power, so for a light that's often left on this represents a gigantic saving in power. Beyond the obvious power savings, there is also the life expectancy. CREE® LEDs are rated to last up to 50,000 hours, compared to around 2,000 hours for a regular "long life" halogen globe. This is a godsend for downlights in difficult to reach locations such as very high ceilings. The last major benefit is the heat produced. A typical halogen downlight generates so much heat that they can cause fires in some circumstances,

whereas an LED downlight is lucky to produce enough heat to warm your hands on a winter's day. They also help to reduce the load on your air conditioning. Installing a

CREE® LED replacement downlight is generally a very straight forward process as well. Our MR16 versions can usually be straight swapped with an MR16 low voltage halogen, with some consideration given to the downlight transformer used (some will cause LED downlights to flicker due to the low load placed on the transformer). If you are replacing a mains GU10 downlight, it could not be simpler; just replace the halogen with our CREE® LED version! Another option is to do away with the downlight transformer for your MR16 downlights, and get them rewired as 240V mains and utilise our GU10 CREE® downlights. This eliminates inefficiencies in the transformer and simplifies wiring, whilst giving you the added benefit of being able to dim the downlights with a standard light



Power supply requirements for LED lamps or lighting modules, such as our MR16 LED downlight replacement globes, can vary considerably and it is essential that a suitable power supply is used. Switchmode transformers, or "electronic transformers" that are designed to run halogen lights, should not be used with LED lighting modules or lamps unless they are specifically certified to do so. In simple terms, LED lamps are compatible with all types of magnetic (linear) transformers, but not all types of switchmode transformers. Most halogen lamp switchmode transformers require a minimum load to function correctly and output a high frequency pulse train

based on the load requirements. As LED lamps draw a fraction of the current of an equivalent halogen lamp (typically ~1/10th), this usually results in problems such as flickering, strobing, or in some cases, no light at all. It may also reduce the life expectancy of the LED lamp. It is essential the maximum input voltage of the LED lamp or module is not exceeded and the power supply can deliver the necessary current required in a linear manner. If using switchmode or electronic power supplies, make sure they are designed for use with LED lamps, otherwise use a linear power supply or a DC output power supply.



LED (

LED Replacement Lamps - MR16

Comparison for CREE® LED Downlight Replacements

Cat No.	ZD-0341	ZD-0343	ZD-0346	ZD0347	ZD-0348	ZD-0349	ZD-0351
Power consumption	3W	3W	3.5W	3.5W	3.5W	3.5W	4W
LED(s)	1x CREE® XP-E	3x CREE® XP-C					
Power per LED	2.6W	2.6W	3W	3W	3W	3W	1W
Brightness	130 lumens	130 lumens	160 lumens	100 lumens	160 lumens	100 lumens	220 lumens
Colour	White	Warm White	White	Warm White	White	Warm White	Warm White
Input voltage	12VAC/DC						
Lens angle	60°	60°	38°	38°	60°	60°	38°
Fitting	MR11	MR11	MR16	MR16	MR16	MR16	MR16
Dimensions (dia x L)	35 x 35mm	35 x 35mm	50 x 50mm				

Cat No.	ZD-0352	ZD-0353	ZD-0354	ZD-0374	ZD-0375	ZD-0362	ZD-0366	ZD-0368
Power consumption	4W	7W	7W	7W	7W	3.3W	3.3W	9W
LED(s)	3x CREE® XP-C	3x CREE® XP-E	3x CREE® XRE-Q2	7 x CREE® XRC				
Power per LED	1W	2W	2W	2W	2W			
Brightness	270 lumens	450 lumens	310 lumens	450 lumens	310 lumens	160 lumens	110-130 lumens	450 lumens
Colour	White	White	Warm White	White	Warm White	White	White	White
Input voltage	12VAC/DC	12VAC/DC	12VAC/DC	240VAC	240VAC	100-240VAC	100-240VAC	100-240VAC
Lens angle	38°	38°	38°	38°	38°	38°	38°	38°
Fitting	MR16	MR16	MR16	GU10	GU10	GU10	E14	PAR30
Dimensions (dia x L)	50 x 50mm	50 x 63mm	50 x 63mm	50 x 63mm	50 x 63mm	50 x 55mm	50 x 73mm	90 x 83mm

MR16 REPLACEMENT LAMPS - 12VAC/DC

MR16 1 x 3W CREE® LED Lamps

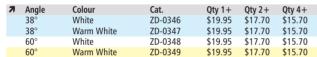
- Each uses one CREE® XP-E LED driven at 3W
- MR16 base
- · Best if powered by linear transformers or switchmode DC supplies
 • Equivalent to a 10-15W halogen
- 12VAC/DC



1 X 3W CREE® MR16 DOWNLIGHT - 38° - WARM WHITE Cat. ZD-0347

1 X 3W CREE® MR16 DOWNLIGHT - 60° - WHITE Cat. 7D-0348

1X 3W CREE® MR16 DOWNLIGHT - 60° - WARM WHITE Cat. ZD-0349



MR16 24 x SMD LED Downlights 120°

Ideal for caravans and mobile homes, these LED lamps will provide a wide beam angle to easily illuminate your surrounds. They use 24 x 5050 SMD LEDs that will output up to 300 lumens of warm white or cool white light depending on which colour you choose.

Specifications	ZD-0560	ZD-0561
Power consumption	4W	4W
Fitting	MR16	MR16
Colour	Cool white	Warm white
LED Type	24 x 5050 SMD LED	24 x 5050 SMD LED
Brightness	300 lm	300 lm
Colour temperature	5500K	3000K
Input voltage	12VAC/DC	12VAC/DC
Lens angle	120 degree 50(Dia) x 46(H)mm	120 degree
Dimensions	50(Dia) x 46(H)mm	50(Dia) x 46(H)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
White	ZD-0560	\$19.95	\$17.70	\$15.70
Warm White	ZD-0561	\$19.95	\$17.70	\$15.70

LED VS HALOGEN

LUMINOUS EFFICIENCY: LEDs produce more light per watt than halogens (Typical halogen 50 Watt = 24Lm/w, Ecolume 15 Watt = 64Lm/w).

ON/OFF TIME AND CYCLING: LEDs light up very quickly. They are ideal for use in applications that are subject to frequent on-off cycling, unlike fluorescent lamps that burn out more quickly when cycled frequently, or HID lamps that require a long time before restarting.

DIMMING: LEDs can very easily be dimmed

COOL LIGHT: LEDs emit no ultraviolet radiation or heat into the illuminated area that can cause damage to sensitive objects or fabrics

LIFETIME: LEDs can have a relatively long life. Fluorescent tubes typically are rated at about 10,000 to 15,000 hours, depending partly on the conditions of use, and halogen lamps at 2,000 - 4,000 hours.

SHOCK RESISTANCE: LEDs,

being solid state components, are difficult to damage with external shock, unlike fluorescent and halogen bulbs which are fragile GO GREEN!: LED's do not contain mercury and other rare earths.



MR16 LED Nichia 083B Downlights

Taking advantage of their small size and high light output efficiency, this LED MR16 lamp utilises three 1 watt Nichia 083B LEDs to produce an amazing amount of light output from just 5 watts of total power consumption. Perfect as a drop-in replacement for MR16 halogen downlights, retail display lights or remote solar/wind/battery power systems where efficiency is paramount. The lens has been perfectly designed and matched to the Nichia LEDs to ensure light dispersion output is as close to a standard halogen as possible.

· 250 Lumen Warm White

Specifications	ZD-0358
Rated voltage:	6 - 24V
Beam angle:	30°
Colour temperature:	3,600K
Brightness:	250 lumens
Dimensions:	50(Dia) x 40(D)mm

'11111	ensions.	JU(DIa) X 4U(D)IIIIII	, ,
7	Lumens	Colour Temp	Cat.
	250	3600K	ZD-035

LRHZU

Lumens	Colour Temp	Cat.	(
250	3600K	ZD-0358	\$

MR16 3 x 1W CREE® LED Lamps

Each uses three CREE® XP-C LEDs driven at 1W each

- MR16 base
- Best if powered by linear transformers
- or switchmode DC supplies Equivalent to a 20W halogen
- 12VAC/DC

3 X 1W CREE® MR16 DOWNLIGHT - 38° - WARM WHITE

3 X 1W CREE® MR16 DOWNLIGHT - 38° - WHITE Cat. ZD-0352



7			Cat.	Qty 1+	Qty 2+	Qty 4+
	3 x 1W	Warm White	ZD-0351	\$34.95	\$31.45	\$27.90
	1 x 3W	White	7D-0352	\$34.95	\$31.45	\$27.90

MR16 3 x 2W CREE® LED Downlights

- Each uses three CREE® XP-E LEDs driven at 2W each
- MR16 hase
- Best if powered by linear transformers or switchmode DC supplies
- Equivalent to a 35W halogen

Cool White

Warm White



3 X 2W CREE® MR16 DOWNLIGHT - 38° - WHITE Cat. ZD-0353

3 X 2W CREE® MR16 DOWNLIGHT - 38° - WARM WHITE Cat. ZD-0354





Cat.	Qty 1+	Qty 2+	Qty 4+
ZD-0353	\$39.95	\$35.90	\$31.90
ZD-0354	\$39.95	\$35.90	\$31.90





OTHER REPLACEMENT LAMPS - LOW VOLTAGE

MR11 2.6W CREE® LED Downlights - 12VAC/DC

Often used for caravan lighting and in reading lights, MR11 is slightly smaller than MR16. Aluminium housing ensures adequate heat dissipation from the high power CREE® LED inside.



- Each uses one CREE® XP-E LED driven a
 MR11 housing and base
 Best if powered by linear AC downlight transformer or 12VDC supply
 Equivalent to a 10-15W halogen globe

Specifications	
Power consumption	3W
LED(s)	1x CREE® XP-E
Power per LED	2.6W
Brightness	130 lm
Input voltage	12VAC/DC
Lens angle	60°
Dimensions	35 x 35mm



CREE

7	Cat.	Qty 1+	Qty 3+	Qty 6+
White	ZD-0341	\$19.95	\$17.70	\$15.70
Warm White	ZD-0343	\$19.95	\$17.70	\$15.70

MR11 12 x SMD LED Downlights, 120°

Great for use as reading lights in caravans but also suitable for a variety of other applications.

Two models available:

GHTING & HOME AUTOMATION

ZD-0562
MR11
12VAC/DC
130 lm
120 degree
5000-7000k
12 x 5050 SMD LEDs
34(Dia) x 29(D)mm
ZD-0563
MR11
12VAC/DC
130 lm
120 degree
2700-3500k
12 x 5050 SMD LEDs
34(Dia) x 29(D)mm





7		Cat.	Qty 1+	Qty 3+	Qty 6+
	White	ZD-0562	\$14.95	\$13.35	\$11.70
	Warm White	ZD-0563	\$14.95	\$13.35	\$11.70

GU5.3 LED Spot Lamp - 12VDC

LED illumination lamps have significant advantages over incandescent lamps because of their low heat generation and low power consumption. They also have a significantly longer working life.

- 12VDC operating voltage

- 20 LEDs per unit



Note: Not suitable for use on switchmode transformers

7	Cat.	Qty 1+
White	7D-0320	\$9.95

G4 LED Replacement Lights - 12VAC/DC

Makes use of 12 x 5050 SMD LEDs to output up to 120 lumens of extremely bright light. Great for use as a low wattage replacement globe in desk lamps, rangehoods, and other household applications. Features a 120 degree lens angle for a broad spread of light.

Specifications	ZD-0568	ZD-0569
Power	1.6W	1.6W
Light output	120 lm	120 lm
Lens angle	120°	120°
Colour	Cool white	Warm white
Colour temperature	5000-7000K	2700-3500K
Dimension	27(Dia)mm	27(Dia)mm
Input voltage	12VDC/AC	12VDC/AC

П	Colour temperature	3000-7000K	2700-3300K		- 1 1
Γ	Dimension	27(Dia)mm	27(Dia)mm		
l	Input voltage	12VDC/AC	12VDC/AC		
	7		Cat.	Qty 1+	Qty 3
	Cool White		ZD-0568	\$13.95	\$12.35

l	Cat.	Qty 1+	Qty 3+	Qty 6+	
Cool White	ZD-0568	\$13.95	\$12.35	\$10.95	
Warm White	7D-0569	\$13.95	\$12.35	\$10.95	

Freecall order hotline: 1800 022 888

Bayonet LED Globe - 4.5VDC

Replace your incandescent lamps with LED style globes! LEDs are much more efficient, and less fragile than filament globes. LEDs mounted on standard bayonet and miniature Edison screw (MES) bases provide excellent replacements in many applications, consuming less power and lasting much longer.



• See our website for specifications.

7	White LED's	Base	Cat	Qty 1+	Qty 2+	Qty 4+
4.5V	3	Bayonet	ZD-0310	\$4.95	\$4.45	\$3.45

REPLACEMENT LED LAMPS 100V-240VAC

GU10 1 x 3W CREE® Downlight - 38° - White

CREE Each uses one CREE® XR-E LED driven at 3W

- GU10 base
- Mains poweredEquivalent to a 10-15W halogen

Specifications:	ZD-0362
Power	3.3W
Fitting	GU10
LED type	CREE® XRE-Q2
Brightness	160 lm
Colour	White
Colour temp.	5,000 - 7,000K
Input voltage	100 - 240VAC
Lens angle	38°
Dimensions	50 x 55mm



7			Cat.	Qty 1+
	White	3.3W	ZD-0362	\$14.95

GU10 3 x 2W CREE® LED Downlights

Each uses three CREE® XP-E LEDs driven at 2W each

- GU10 base
- Mains poweredEquivalent to a 35W halogen
- Dimmable with trailing or leading edge light dimmer

 • 38° lens and
- lens angle





CREE

7		Cat.	Qty 1+	Qty 3+	Qty 6+
	3 x 2W - White	ZD-0374	\$39.95	\$35.90	\$31.90
	3 x 2W - Warm White	ZD-0375	\$39.95	\$35.90	\$31.90

GU10 Base Socket

Socket and base for GU10 downlights.

• 150mm flying lead with terminal block.



7	Cat.	Qty 1+	Qty 10+	Qty 50+
	PS-4076	\$7.95	\$6.95	\$6.25

Par 30 LED Downlight

Specifications:	ZD-0368
Power	9W
Fitting	PAR 30
LED type	7x CREE® XRC
Brightness	450 lm
Colour	Daylight white
Colour temp.	5,000 - 7,000K
Input voltage	100 - 240VAC
Lens angle Dimensions	38°
Dimensions	90 x 83mm



	Cat.	Qty 1+	Qty 3+	Qty 6+	
Davlight White	ZD-0368	\$119.00	\$106.95	\$83.50	

E14 CREE® LED Downlight

ZD-0366
3.3W
E14
CREE® XRE-Q2
110 - 130 lm
White
5,000 - 7,000K
100 - 240VAC
38°
50 x 73mm



7	Cat.	Qty 1+	Qty 2+	Qty 4+
Daylight White	ZD-0366	\$24.95	\$20.00	\$18.00

LED Modules & Strips

FLEXIBLE LED STRIPS

Ultra Bright Flexible Adhesive LED Strip Lights

These flexible adhesive LED strips are made using the highest brightness 5060-SMD type LEDs, and feature 60 of these LEDs per metre of stripping Each strip comes as a 5m length, which can be broken down into individual 5cm sections with 3x LEDs that can be individually soldered to apply power. We understand that not all applications require a full 5m length, so we cut them to length and sell by the 50mm section, so that you can get the exact length you require. The strip itself is a flexible circuit board, backed with quality 3M brand adhesive tape to ensure a long term adhesion to your mounting surface. Powered by 12VDC

• Compatible with our aluminium channel system HH-8535

Two types available:

FLEXIBLE ADHESIVE LED STRIP, 60X 5060-LED PER METRE, COOL WHITE ZD-0570

FLEXIBLE ADHESIVE LED STRIP, 60X 5060-LED PER METRE, WARM WHITE







7	Per 50mm Section	Cat.	Qty 1+	Qty 20+	Qty 100+
	Cool White	ZD-0570	\$2.95	\$2.15	\$1.45
	Warm White	ZD-0572	\$2.95	\$2.15	\$1.45

Flexible Adhesive LED Strips

These LEDs are mounted on a flexible printed circuit board with no fuss, no mess 3M self-adhesive backing. Ideal for illuminated signs, window displays, cabinet lighting and other small lighting applications. Single colour versions feature 60x 3528-type LEDs per metre, and the RGB version features 30x 5060 type LEDs per metre. Each strip comes as a 5m length, which can be broken down into individual sections with 3x LEDs that can be individually soldered to apply power. We understand that not all applications require a full 5m length, so we cut them to length and sell by the section, so that you can get the exact length you require.

SINGLE COLOUR VERSIONS:

Cat 7D-0473 WHITE WARM WHITE Cat ZD-0487 Cat ZD-0475 Cat 7D-0479



Close up of the LEDs

Dimensions per section





50x8mm

_			_			
7	Colour	Price per	Cat.	Qty 1+	Qty 20+	Qty 100+
	White	50mm	ZD-0473	\$1.95	\$1.45	\$1.00
	Red	50mm	ZD-0475	\$1.95	\$1.45	\$1.00
	Blue	50mm	ZD-0479	\$1.95	\$1.45	\$1.00
	3 x Warm White	50mm	ZD-0487	\$1.95	\$1.45	\$1.00
	3 x RGB LED Module	100mm	ZD-0476	\$2.95	\$2.45	\$2.20

50x8mm

Tech Tip

Our range of LED strip lights are made using some of the most common type of SMD LEDs used in LED lighting products; the 3528 type, and the 5050/5060 type. Their

model designations actually come from their footprint dimensions: 3528 = 3.5x2.8mm, 5050 = 5.0x5.0mm, and 5060 = 5.0x6.0mm. The 3528 type is a single LED emitter type in a very compact package, whereas the 5050 and 5060 type are commonly referred to as "triple-chip" due to having three LED emitters built into the one package. The 3528 typically offers superior lumen performance per emitter and greater light efficiency than 5050/5060, but the 5060/5060 triple-chip types are more cost effective due to lower manufacturing costs and reduced production costs when built into a finished product.

IP67 Waterproof Flexible LED Strip Lights

These one metre long IP67 rated waterproof flexible LED strip light feature 30x 5060 type LEDs and are rated at 12VDC. These are great for outdoor lighting, 4WD, camping, signage and mood lighting applications. Fitted with waterproof connectors at each end, they can be easily daisy chained to make a longer strip light (maximum length 5m).

IP67 WATERPROOF FLEXIBLE LED STRIP LIGHT, 1M, RGB ZD-0478

IP67 WATERPROOF FLEXIBLE LED STRIP LIGHT, 1M, WHITE Close up of LEDs 7D-0477

• ZD-0478 suits our LED Controller MP-3273.

	ZD-0477	ZD-0478
Voltage	12VDC	12VDC
Colour	White	RGB
Current	600mA	200mA per colour
Lumens	300	R:180, B:100, G:380
LEDs	30 x 5060	30 x 5060
Dimensions	1000 x 50mm	1000 x 50mm



Otv 10+

\$31.45

\$35.90



Otv 25+

\$24.35

\$27.90

	LEDS	30 X 5060	3	U X 5060	
Dir	mensions	1000 x 50mm	100	00 x 50mm	
7	Length	1 metre		Cat.	Qty 1+
	White L	ED Flexible Mod	lule	ZD-0477	\$34.95
	RGBIFF) Flexible Modu	le	7D-0478	\$39.95

Ultra Bright IP67 Waterproof LED Flexible Strip Light

A 1 metre long fully waterproof, flexible LED strip light that is perfect for any outdoor application needing some bright, reliable lighting. This flexible strip light uses 60 of the highest brightness 5060-SMD type LEDs that are fully sheathed in a protective plastic casing to protect from water, dust and damage. Each also features waterproof male/female connections at each end to ensure that your power connection is also protected from the elements, and at the same time allows multiple strips to be daisy-chained together to create a longer length (up to 5m max). Powered by 12VDC.





7	Cat.	Qty 1+	Qty 3+	Qty 6+
Length 1 metre	ZD-0579	\$49.95	\$44.90	\$39.90

RGB LED Flexible Strip Lighting Kit - 12VDC

A full RGB flexible LED lighting kit that contains everything you will need to set up your own colour changing strip lighting system. Simply connect the LED strip and power supply to the controller and away you go. The LED Strip has a self adhesive backing which makes it very easy to install. Ideal for cove lighting, bar lighting or perhaps some dynamic lighting for the pool room. The strip is moulded sealed which makes it

suitable for outdoor applications also. The remote control allows you to select from various colour changing modes or fixed colour modes.

- 5 metre length RGB flexible strip LEDs per metre: 30
- LED RGB panel controller
- 12VDC power supply

7	Lawarth	Cab	Oh. 1 :	04, 10 :	O41, 2E 1
~	Length	Cat.	Qty I +	Qty 10+	Qty 25+
	5 metre roll	SL-3958	\$149.00	\$133.95	\$103.95

BEWARE!!!

BEWARE OF ONLINE VENDORS - YOU GET WHAT YOU PAY FOR!! We are aware that there are a growing number of online vendors selling LED strip lighting products for ridiculously low prices, and on the face of it they seem like a fantastic deal.

BUT BE WARNED - Not all LEDs are the same, even if they are the same type!!

LED manufacturers actually "bin" LEDs according to their output, and provide a whole range of lumen output "bins" from very dim to very bright and price them accordingly. These online sellers can offer such low prices because they are selecting LEDs from the lowest lumen output bins. We deliberately select the HIGHEST lumen output Epistar

brand LEDs for our LED strip lighting products. See for yourself - compare the lumen output of what those online vendors offer to what we have here in our catalogue, you will quickly see that what is offered online is nowhere near equivalent (if they will even provide the lumen output specifications).

LED Modules & Strips

SOLID LED STRIPS

Solid LED Strip Lights - 12 or 24VDC

An efficient, bright and affordable LED lighting solution, which is safe and easy to install. Each strip features wide angle, high brightness SMD LEDs which are powered by either 12VDC or 24VDC. They are fixed easily using the strong 3M brand self adhesive backing tape or mounted into a range of aluminium and plastic extrusions and diffusers available separately. Each 500mm length can be snapped into individual segments and are powered by either 12VDC or 24VDC. Applications include under cabinet kitchen bench lighting, hallway or mood lighting, marine/caravan/motorhome lighting, commercial strip lighting, retail shop fit outs, and many many more.

• Available in 8mm and 11mm widths, 12VDC or 24VDC, and in a choice of warm or cool white

* COMPATIBLE WITH OUR ALUMINIUM CHANNEL SYSTEM, HH-8535

	ZD0461	ZD0463	ZD0465	ZD0467	ZD0550	ZD0552	ZD0554	ZD0556
Voltage	12VDC	12VDC	24VDC	24VDC	12VDC	12VDC	24VDC	24VDC
Colour	White	Warm white	White	Warm white	Warm white	White	Warm white	White
Current	200mA	200mA	100mA	100mA	500mA	500mA	200mA	200mA
Lumen output	150	125	150	125	340	390	280	320
LED quantity	30 x 3528	30 x 3528	30 x 3528	30 x 3528	30 x 5050	30 x 5050	25 x 5050	25 x 5050
No. of segments	10	10	5	5	10	10	5	5
Light angle	120°	120°	120°	120°	120°	120°	120°	120°
Dimensions	500x8mm	500x8mm	500x8mm	500x8mm	500x11mm	500x11mm	500x11mm	500x11mm

Features:

- 8mm strips fitted with 3528 single chip SMD LEDs
- 11mm strips fitted with 5050 tri-chip SMD LEDs Strips can be snapped into individual segments and powered individually
 Strips can be integrated with our aluminium
- and plastic extrusions and diffusers

7	Size	Colour	Voltage	Cat.	Qty 1+	Qty 10+	Qty 25+
	8mm	White	12V	ZD-0461	\$19.95	\$17.70	\$13.70
	8mm	Warm White	12V	ZD-0463	\$19.95	\$17.70	\$13.70
	8mm	White	24V	ZD-0465	\$19.95	\$17.70	\$13.70
	8mm	Warm White	24V	ZD-0467	\$19.95	\$17.70	\$13.70
	11mm	Warm White	12V	ZD-0550	\$34.95	\$31.45	\$24.35
	11mm	White	12V	ZD-0552	\$34.95	\$31.45	\$24.35
	11mm	Warm White	24V	ZD-0554	\$29.95	\$26.90	\$20.70
	11mm	White	24V	ZD-0556	\$29.95	\$26.90	\$20.70

IP66 Aluminium Backed LED Strip Lights

When a degree of weather protection is required for your LED strip lighting, look no further. IP66 rated, with a solid aluminium backing for installation in tougher environments, these are the LED strip lights of choice for marine, caravan, motorhome, or outdoor domestic and architectural applications. Powered by 12VDC and available in warm white and cool white colour temperatures, with fly leads and weatherproof connectors already fitted for ease of installation.

Specifications	ZD-0468	ZD-0469
Voltage	12VDC	12VDC
Colour	White	Warm white
Current	200mA	200mA
Lumens	150	125
LEDs	30x 3528	30x 3528
Dimensions	500x8mm	500x8mm



7		Cat.	Qty 1+	Qty 10+	Qty 25+
	12V 30 x White LED Strip	ZD-0468	\$29.95	\$26.90	\$20.70
	12V 30 x Warm White LED Strip	ZD-0469	\$29.95	\$26.90	\$20.70

SMD LED Light Strip - 12VDC

This versatile LED light strip features 30 SMD LEDs mounted on a 480mm long piece of 8mm wide PCB. It's clever design makes it a lot more useful than many others, using a series/parallel combination to take care of power distribution. The design features a main voltage rail that runs the entire length, which makes it very easy to add extra boards in parallel. Here is where it gets interesting. The components are broken up into 10 groups containing three LEDs and a voltage drop resistor. Each group is then paralleled to the board. This ensures that there are no voltage issues along the line and also something more-each group can operate independently, and even be cut free and used as an independent 3-LED light running from 12VDC. It's really versatile, and you can find all the data on our website. - Fin Carried at the

		men hall though	E brodit B	11 11 11 11 11	2 2
Specifications		14-7400	96168-30	-	
Forward voltage	12VDC.	-/			
Forward current	200mA.	, (5		A LEGISLAND AND ADDRESS OF THE PARTY OF THE	
Dimensions	or 10 units measuring		n each		
7 Colour		Cat.	Qty 1+	Qty 10+	Qty 25+
White		ZD-0462	\$29.95	\$26.90	\$20.70

RGB LED Modules - 12VDC

With these modules you can control red, green or blue individually or all at once giving an almost infinite palette of colour. All models are 12V rated and are suitable for strip lighting, mood lights, displays or signage.

This range of RGB LED modules and strips are suitable for use with our MP-3273 RGB LED controller

5 X RGB LED MODULE 12VDC

Supplied with 5 superflux high intensity RGB LEDs in a solid length of PCB. It has a viewing angle of 85 degrees with mounting bracket and connecting wires included. Cat ZD-0456

X 10 RGB LED SMD MODULE 12VDC

Consisting of a total of 30 surface mount RGB LED in a long light strip; these can also be cut into 3 LED sections for custom applications. Cat ZD-0466

7		Cat.	Qty 1+	Qty 10+	Qty 25+
	5 x RGB LED Module	ZD-0456	\$9.95	\$8.75	\$6.75
	3 x 10 RGB LED SMD Module	ZD-0466	\$29.95	\$26.90	\$20.70

Note: Stock may vary from what is pictured

LED Light Bar with Diffuser

Containing an LED strip with 50x 3528 LEDs, housed in durable plastic case and covered with an acrylic diffuser, this light bar provides a fully formed LED lighting solution. With no additional housing required simply install the bar in the desired location and supply it with power from a plugpack or battery. The end of the bar has a neat groove moulding to conceal the wires and allow additional units to be placed end to end without the join being noticed.

· Compatible with our aluminium channel system, HH-8535

Voltage	12VDC
Lumens	250
Current	500mA
Colour	Cool white 5500k
Dimensions	520(L) x 11(W) x 14(H)mm

LED LIGHTING STRIP ACCESSORIES



7	Cat.	Qty 1+	Qty 10+	Qty 25+
Sold each	ZD-0489	\$44.95	\$40.45	\$31.45

Extruded Aluminium Channel for LED Strip Lights

This extruded aluminium channel is designed for mounting and protecting our range of 8-12mm width LED strips to provide a complete high quality lighting solution. Mounted strips are given substantial protection, rigidity and aesthetic appeal, making them ideal for architectural light fixtures, caravan or outdoor use. Use the strip with a little creative thinking and you can create a variety of creative lighting solutions. Recess the channel behind skirting or fascia to create lighting effects along a wall, ceiling or floor. Screw or glue the channel into a display cabinet to provide a directed ribbon of light on your valued items. Once the channel is in position simply insert your chosen LED strip into the channel and connect to power.

Dimensions: 1030(L) x 14(W) x 14(H)mm



7		Cat.	Qty 1+	Qty 4+	Qty 10+
	Extruded Channel	HH-8535	\$9.95	\$8.75	\$7.75
	Diffuser Insert Strip	HH-8537	\$9.95	\$8.75	\$7.75
	Diffuser Insert Strip Flanged Clear	HH-8540	\$19.95	\$17.70	\$15.70
	Channel Endcap (pack of 2)	HH-8536	\$4.95	\$4.45	\$3.90
	Diffuser Endcap (pack of 2)	HH-8541	\$3.95	\$3.45	\$3.15
	Clip Mount (pack of 2)	HH-8542	\$2.95	\$2.60	\$2.30

LED Modules & Fluoro Replacement Lamps

Linkable Aluminium LED Strip Lighting

A stylish aluminium LED strip light. Suitable for caravan, marine, 4WD, auto and domestic applications. Connect multiple lights together with the include connector to match your desired length. Screw mounting holes provided on the ends for easy installation.



•	Works	on	12V a	nd 24	V	systems

• 3528 SMD LEDs (42 pieces)



Waterproof (IP65) LED Lighting Modules

Endless possibilities - backlighting signs, strip lighting in stairwells & passageways, boats, garages etc. Supplied with 3 LEDs per module, 10 modules, with 100mm flying leads for termination. Each module is spaced at approximately 110mm between centres. Simply connect up a 12VDC 600mA supply and away you go.

- IP65 rated
- · Waterproof and submersible
- Resin sealed
- Adhesive backed for quick installation
- Brightness per LED: White: 1200 1500mcd Blue: 600 - 800mcd
- Dimensions: Each module: 47(L) x 17(W) x 6(H)mm Total length: Approx. 1m LED spacing: 15.6mm



10 X 3 LED MODULE WHITE Cat. ZD-0490



10 X 3 LED MODULE BLUE Cat. 7D-0492

7	Cat.	Qty 1+	Qty 10+ Qty 25+
White	ZD-0490	\$24.95	\$22.35 \$17.35
Warm White	ZD-0491	\$24.95	\$22.35 \$17.35
Blue	ZD-0492	\$24.95	\$22.35 \$17.35

RGB LED Controller - 12/24VDC 5A

This 3 channel controller allows full control of the modules above, by varying the brightness, speed and come with different lighting modes to suit most applications. Unit requires 12-24V supply and will

handle up to 5A maximum load per channel.



- Input voltage: 12/24VDC 5A
- Will control up to 5A(max) per channel, 12V 280W, 24V 560W
 Dimensions: 211(L) x 40(W) x 30(H) mm

Can be used with the following RGB LED Modules:

5 x RGB LED Module 12VDC Cat. ZD-0456 • 3 x 10 RGB LED SMD Module 12VDC Cat. 7D-0466 • IP67 3 x 10 RGB LED Flexible SMD Module Cat. ZD-0478

7			Cat.	Qty 1+	Qty 10+	Qty 25+
	12/24VDC	5A	MP-3273	\$59.95	\$53.95	\$47.90

Multifunction LED Controller with Remote

Adjust and manage your LED lighting effects with this easy-to-use 3-channel RGB controller. It's great for applications like back lighting, mood lighting and commercial signage. Comes complete with an RF remote control, so you can adjust your LED effects from a distance of up to 50 metres. It features 12 adjustable modes, 8 speeds plus pause and brightness control. Unit requires 12 - 24V supply and will provide up to 5A maximum load per channel.

• Dimensions: 211(L) x 40(W) x 30(H)mm

Compatible with the following RGB LED modules:

- 5 x RGB LED Module 12VDC Cat ZD-0456
 3 x 10 RGB LED SMD Module 12VDC Cat ZD-0466
 IP67 3 x 10 RGB LED Flexible SMD Module Cat ZD-0478

7		Cat.	Qty 1+	Qty 3+	Qty 6+
	12/24VDC 5A	MP-3275	\$79.95	\$71.95	\$63.95

FLUORO REPLACEMENT - ADAPTORS & TUBES



Easily convert traditional T8 fluorescent lighting to more energy efficient T5 series tubes using these tube adaptor sets. T5 tubes output the same light level as standard T8 tubes while consuming up to 40% less power. By comparison, LED replacements for fluorescent lights use similar power, and/or produce less light, and cost SEVERAL times

While many LED lighting options are available, we have specifically rejected LED fluoro replacements and chosen to sell these converters due to price, convenience and safety. Many LED tubes are known fail prematurely, with the electronics being poor quality, and the LEDs themselves being irregular in colour. Currently there are no mandatory electrical safety requirements for LED fluoro tube replacements and many common LED tube varieties pose a real electrocution hazard! By contrast T5 tubes are reliable and readily available in a brand name at a low cost, and are very safe; with these T8-T5 adaptors being approved by electrical safety standards. Lets not also forget the frightfully high cost of LED fluoro replacement tubes!

With T8 tubes commonly found in large area lighting systems for offices, schools, small businesses and warehouses the savings achieved using these adaptors adds up very

Installation couldn't be more simple - just remove the old T8 tube and starter, replace with the supplied starter-fuse, attach the two adaptor ends to your new T5 tube, install as per usual, and enjoy the power savings!

NOTE: Not suitable in T8 fittings with electronic ballasts.

Two models available:

SL-2746 for replacing 20W 590mm (2ft) T8 tubes with 14W T5 tubes SL-2748 for replacing 40W 1200mm (4ft) T8 tubes with 28W T5 tubes



LRAZU

7	Cat.	Qty 1+	Qty 3+	Qty 6+
Replaces 20W Tubes	SL-2746	\$17.95	\$15.95	\$14.35
Replaces 40W Tubes	SL-2748	\$19.95	\$17.70	\$15.70

ST-3017

8W 285mm Fluoro Tube

15mm Cat. Qty 1+

12W Round Fluoro Tube

- Suits our QM-3529 lamp
 Outside diameter 120mm
- 4-pin connector



\$7.95

7	Cat.	Qty 1+	Qty 4+	Qty 10+
	QM-3521	\$12.95	\$11.35	\$10.35

22W Round Fluoro Tube

Replacement tube to suit the QM-3522 and QM-3524 lamps

- 22W
- 30mm dia
- O.D. 207mm
- 4-pin plug

1	Cat.	Qty 1+	Qty 4+	Qty 10-
	QM-3523	\$7.95	\$6.95	\$6.25

12VDC Compact Fluoro Lights

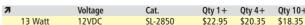
Looks like a standard PL compact fluoro light, but it is in fact 12VDC operated. It suits an E14 small Edison screw base so it can't mistakenly be screwed into a 240V socket. Input circuitry means you dont have to worry about voltage polarity.

To mount, use our SES E14 base, Cat. PS-4072

13 WATT 3D TUBE

Equivalent to a 60W standard globe in light output. Size 140mm total length.

Current draw 1.2A





Please note: There are some

240V SES bases so make sure

the SES base is 12V before

plugging these in.

EDISON & BAYONET HALOGEN REPLACEMENT LAMPS

Incandescent Replacement Light Globes

In its hasty ban of standard filament type light globes with so-called energy saving ones, the government forgot about dimability. Standard energy saving globes won't work with light dimmers!

The globes shown below are legal and provide the standard resistive load for light dimmers. They also provide a much softer light. Available in Bayonet or Edison Screw.

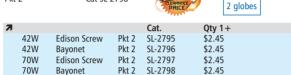
- 42W is 60W equivalent70W is 100W equivalent
- Most importantly they behave just the way standard globes did with dimmers
 Sizes for most domestic uses:

42W EDISON SCREW Pkt 2 Cat SL-2795

42W BAYONET Pkt 2 Cat SL-2796

70W EDISON SCREW (equivalent to 100W) Pkt 2 Cat SL-2797

70W BAYONET (equivalent to 100W) Pkt 2 Cat SL-2798



Batten Globe Holder

A batten holder that is easy to fit. Unit comes apart for easy mounting. The cable screw connectors are easy to get to and are at a right angle. Supplied with plaster board mounting plugs also. A much improved batton holder.

Accepts standard BC globes.



Packs of

7	Cat.	Qty 1+	Qty 10+	Qty 50+
	PS-4070	\$7.95	\$6.95	\$6.25

Halogen Lamp - 50 Watt Coloured - 12V

These have coloured glass over the front and are ideal for house, shop, display and garden lighting. 51mm dia. large size and 38° wide angle

Note: Red no longer available.

	Cat	Qty 1+	Oty 10 :	O+v 2E 1
1	Cat.	Ųly I +	QLY IU+	Qty 25+
Blue	SL-2743	\$4.95	\$4.45	\$3.90

Base

Base to suit both 35mm and 50mm lamps.

- Size 17(Dia.) x 9(H)mm.
- Cable length 120mm. Rating 100W 25V.

7	Cat.	Qty 1+	Qty 10+	Qty 25+	
	SI-2735	\$4.95	\$4.45	\$3.90	

50mm Halogen Downlight Holder

Install your own halogen lamps in the ceiling with this holder. Simply drill a hole and this fitting pushes in and is held with clips. The halogen globe then pushes into

- · Colour is white, complete with lamp base.
- For 51mm. Approx cutout is 60-65mm.
 Dimensions total width at front 75mm. Depth 55mm.

7	Cat.	Qty 1+	Qty 10+	Qty 25+
	SL-2738	\$6.95	\$6.25	\$5.50

50mm Adjustable Halogen **Downlight Holder**

Install your own professional halogen lighting system anywhere you like. The globe holder is finished in high gloss white and will pivot up to 40° angle which is enough to highlight say, a picture on a wall.



Approx. cutout is 90mm.
Dimensions - Total width at front is 102mm and the depth is 39mm.

This holder suits all of our 51mm 12V halogen lamps.

7	Cat.	Qty 1+	Qty 10+	Qty 25+
	SL-2739	\$12.95	\$11.35	\$10.35

HALOGEN GLOBES

6V 10W Halogen Globe

• 2 pins

IGHTING & HOME AUTOMATION

- 3.4mm pin spacing
- Pin length 7mm 8mm globe diameter
- 22mm length

7	Cat.	Qty 1+	Qty 10+	Qty 25+
	ST-3088	\$5.95	\$5.25	\$4.75

6V 55W Halogen Globe

Replacement globe to suit our ST-3300 halogen spotlights.

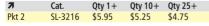


Freecall order hotline: 1800 022 888

7	Cat.	Qty 1+	Qty 10+	Qty 25+
	SL-3221	\$5.95	\$5.25	\$4.75

12V 5W Halogen Globe

- 12V @ 5W.
- 4mm pin spacing.
 8mm pin length Total length: 30mm
- Bulb dia: 8mm
- Pkt 2



12V 10W Halogen Globe

Halogen globe for illuminated fogger.

12V, 10 watts

4mm pin spacing.

Pin length: 8mm

- Total length: 30mm.
- Bulb dia: 8mm Pkt 2

7	Cat.	Qty 1+	Qty 10+	Qty 25+
Pkt 2	SL-3217	\$5.95	\$5.25	\$4.75

12V 50W Halogen Globe



Same as 100W unit below, but this one is 50W

7	Cat.	Qty 1+	Qty 10+	Qty 25+
12V 50W	SL-2726	\$5.95	\$5.25	\$4.75

12V 100W Halogen Globe



These are used in hand held spotlights

- Fitting and contact is by 2 pins which are 6mm apart.
 Length including pins is 40mm.

7	Cat.	Qty 1+	Qty 10+	Qty 25+
12V 100W	SL-2724	\$4.95	\$4.45	\$3.90

12V 100W Halogen Globe



12/24V JC Halogen Globes



- 2 pin halogen globes.As used in some models of our garden lighting.
- Fitting and contact is by 2 pins SL-2722 - 22mm long, pin spacing: 3mm, 8mm dia,
- 8mm pins. SL-2723 - 30mm long, pin spacing: 4mm, 10mm dia, 10mm pins
- · 2 voltages available.

7		Cat.	Qty 1+	Qty 10+	Qty 25+	
12	/ 20W	SL-2722	\$3.95	\$3.45	\$3.15	
24	/ 35W	SL-2723	\$4.95	\$4.45	\$3.90	

32V 150W Halogen **Swimming Pool Light**



Suits stroud type pool lights.

7	Cat.	Qty 1+	Qty 10+	Qty 25+
	SL-2725	\$12.95	\$11.35	\$10.35

HANDLING HALOGEN GLOBES

Due to the high temperature of the halogen globes the glass envelope can crack unless it is very clean. If you leave grease or fingerprints on the globe, clean the glass with methylated spirits (preferably) before using.

Tip. Do it whether you've touched them or not!

NEONS

90V NE2 Neon



Would you believe it? After about 100 years of orangeyred neons we now can get blue and green ones! You'll buy one out of curiousity!

- Strike voltage: 82V
 Needs 270k resistor in series for 240V operation.

7	Cat.	Qty 1+	Qty 10+	Qty 25+
Orange/Red	d SL-2690	\$0.90	\$0.80	\$0.70
Blue	SL-2695	\$0.90	\$0.80	\$0.70
Green	SL-2696	\$0.90	\$0.80	\$0.70

TORCH GLOBES

Krypton globes give up to 70% more light output compared to standard globes.

Flange Type Krypton Torch Globes





2.2V 470mA	
Suitable for 2 x AA batteries 2.4V 520mA	Cat. SL-3200
Suitable for 2 x C batteries 2.4V 700mA	Cat. SL-3202
 Suitable for 2 x D batteries 	Cat. SL-3204
2.4V 700mASuitable for 3 x D batteries	Cat. SL-3206
4.8V 750mASuitable for 4 x D batteries / Lante	ern Cat. SL-3208

7	Cat.	Qty 1+	Qty 10+	Qty 25+
Pkt 2	All Types	\$2.95	\$2.60	\$2.30

2.5V Krypton Torch Globe -**Edison Screw**

- 300mA
- Suitable for 2 x 1.5V batteries



7	Cat.	Ωtv 1⊥	Qty 10+	Otv 25±
**	cut.	Qty I I	Qty 101	Qty 23 i
Pkt 2	SL-3210	\$2.65	\$2.30	\$2.07

4.8v Krypton Torch Globe -**Edison Screw**

• 300mA



7	Cat.	Qty 1+	Qty 10+	Qty 25+
Each	SL-3211	\$1.95	\$1.75	\$1.55

3V 2W Torch Globe

- Edison screw
- 17.5mm overall length4.7mm diameter
- 8.5mm globe length



7	Cat.	Qty 1+	Qty 10+	Qty 25+
Pkt 2	ST-3002	\$3.95	\$3.45	\$3.15

3V 300mA Bi-Pin Globe

- 3VDC @ 300mA
- RI Pin
- Total Length 19.5mm
- Diameter 4mm
- Length 12mm



7	Cat.	Qty 1+	Qty 10+	Qty 25+	
Pkt 2	SI-3213	\$2.95	\$2.60	\$2.30	

XENON

3V Xenon Globes

Cat. SL-3218

- 3V. 0.3A.
- Pin Spacing: 1.27mm
- Pin length: 8mm.
 Total length: 19.56mm
 Bulb Dia: 4.11mm.
- Cat. SL-3219
- 3V. 0.3A.
- Pin Spacing: 1.27mm
- Pin length: 6.84mm. Total length: 15.7mm
- Bulb Dia: 3.23mm.

7	Cat.	Qty 1+	Qty 10+	Qty 25+
Pkt 2	SL-3218	\$9.95	\$8.75	\$7.75
Pkt 2	SI-3219	\$9.95	\$8.75	\$7.75

4.7V 400mA Xenon Globe

- 4.7VDC @ 400mA.
- Flange type globe.
- Overall Length 27mm.
- Globe Length 14mm.

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7	Cat.	Qty 1+	Qty 1
	\$1-3207	\$4.95	\$4.4

Xenon Flash Tube

As used in strobe kits.

Use Cat. MM-2520 trigger transformer shown on the left



7	Cat.	Qty 1+	Qty 10+	Qty 25+
	SL-2692	\$6.95	\$6.25	\$5.50

TECH TIP

USB Plamsa Ball (GE-4089) can be used to safely check globe colour. The globe will light up near the Plasma Ball.

Transformer - Strobe Trigger

Used to trigger small XENON discharge lamps such as our Cat. SL-2692.

 Dimensions: 10mm x 7mm dia



7	Cat.	Qty 1+	Qty 10+	Qty 25+
	MM-2520	\$2.95	\$2.60	\$2.30

GLOBES & HOLDERS

Illuminated Doorbell Globe

Replacement globe for our doorbell SP-0782 switch, can be used as a replacement for other brand doorbells.

work on lower voltages.

Length 27mm Globe is 12V. but will

7	Cat.	Qty 1+	Qty 10+	Qty 25+
	SL-2720	\$1.95	\$1.75	\$1.55

12V 5W Courtesy Lamp

Replacement globe to suit our ST-3016 Lamp.



12V Switch Globe

ST-3018

As used in our illuminated pushbutton switches Cat. SP-0742/50/52/53



\$1.55

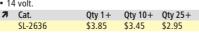
\$1.75

7	Cat.	Qty 1+	Qty 10+	Qty 25+
	SL-2635	\$5.95	\$5.25	\$4.75

14V Car Alarm Switch **Replacement Globes**

Replacement globes for flashing switches / bezels for car alarms

- BI pin • TI
- 2.54 lead spacing • 14 volt.



Mini Lamps





A large range of various sizes and voltages of mini lamps.

• Supplied with wiring cable pre connected.

Large Size	Volts	Cat.	Wire Colour
Globe size - 4(Ø) x 10mm	1.5	SL-2670	White
PVC lead length - 150mm	3	SL-2671	Red
Current - 0.1A	6	SL-2673	Blue
	9	SL-2674	Green
	12	SL-2675	Yellow

Small Size	Volts	Cat.	Wire Colour
Globe size - 3(Ø) x 7mm	1.5	SL-2680	White
PVC lead length - 100mm	3	SL-2681	Red
Current - 0.1A	6	SL-2683	Blue
	9	SL-2684	
Qty prices for one type only	12	SL-2685	Yellow

7	Cat.	Qty 1+	Qty 5+	Qty 10+	
	All Types Each	\$1.30	\$1.15	\$1.01	

Lilliput Globes

Qty 25+

\$3.90

- Total length 17mm.
- Width 4.5mm.
- · Glass length 8mm.

7	Current	Cat.	Qty 1+	Qty 10+	Qty 25+
6.3V	200mA	SL-2650	\$0.95	\$0.85	\$0.75
12V	120mA	\$1-2652	\$0.95	\$0.85	\$0.75

Miniature Edison Screw Globes

- Total length 27mm.
- Width 9mm
- Glass length 14mm.

7	Current	Cat.	Qty 1+	Qty 10+	Qty 25+
6.3V	250mA	SL-2654	\$0.85	\$0.75	\$0.65
12V	100mA	SL-2656	\$0.85	\$0.75	\$0.65

Globe Holder

Standard MES globe holder.

Suits SL-2654/6 above



7	Cat.	Qty 1+	Qty 10+	Qty 50+
	SL-2658	\$0.95	\$0.85	\$0.75

Bakelite Globe Holder

High quality MES globe holder with a round bakelite base

- · Wires are attached to the
- socket by screws. No soldering required.
- Holder can easily be screwed to a base plate
- · Height 19mm. • Suits SL-2654/6 above.

7	Cat.	Qty 1+	Qty 10+	Qty 50+
	CI 26E0	¢2.0E	¢2.60	¢2.20

E14 12VDC Socket - (SES)

Suits E14 small Edison screw fluoro globes. Rated for 12VDC, suits compact fluoro SL-2850

 Base size: 40(Dia) x 42(H)mm Mounting holes 30mm apart.





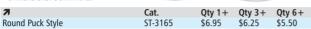
7	Cat.	Qty 1+	Qty 10+	Qty 50+
	PS-4072	\$4.95	\$4.45	\$3.90

BATTERY OPERATED LIGHTING

Rite Light

These innovative lights allow you to put light where you need it without the hassle of cords and plugs. Simply mount by the Velcro® strips under cabinets, on shelves, in cupboards or even in those hard to reach areas of the shed or garage. Simple one-touch operation and super bright white LEDs make them the most versatile lights you'll ever purchase.

- Requires 3 x AAA batteries
- 5 LEDs
- 2 lighting modes
- Dimensions: 90mm Dia.



Wireless Cabinet LED Lights

A perfect lighting solution for cupboards, shelves and drawers! These compact battery operated LED lights are mounted flush inside and will automatically turn on when the door or drawers are open. They are very low power consumption and have long LED life. Maintenance will not be an issue, simply screw in and forget!

Two models available

4 LED CABINET LIGHT

- Requires 3 x AAA batteries
- Dimensions: 70(H) x 45(W) x 19(D)mm Cat ST-3191

7 LED CABINET LIGHT

- · Rotating light head
- Four stage on/off switch
 Requires 3 x AAA batteries
- Dimensions: 115(H) x 45(W) x 28(D)mm
- Cat ST-3192

7		Cat.	Qty 1+	Qty 3+	Qty 6+
	4 LED Cabinet Light	ST-3191	\$9.95	\$8.75	\$7.75
	7 LED Cabinet Light	ST-3192	\$11.95		

1W LED Light with Swivel Bracket

Very handy little 1W LED light with swivel bracket, is great for dark cupboards, garages or hard to reach areas. Simply place on a shelf or mount on a wall, and switch on. No mains power required.

- Requires 3 x AA batteries

坦

- Swivels up to 330°
 Detachable mounting brackets included

Dimensions: 90(H)mm x 87(Dia)mi	n		6	
7	Cat.	Qty 1+	Qty 3+	Qty 6+
	ST-3187	\$11.95	\$10.70	\$9.50

12VDC LIGHTING

Mini LED Light

Pre wired in a sleek and compact design, this is a perfect mini LED light for illuminating harsh areas. Using new advanced lens technology the LEDs increase light output for optimal lighting with minimal power. The 12 volt light draws 10% of the power of conventional lights. Sealed stainless steel construction allow for placement in tight spaces and harsh environments. Horizontal and vertical mounts provide a variety of mounting options. Can be used in step, board, accent

lighting as well as marine applications!

- White powdercoated finish
- Dimensions: 39(W) x 12.7(H) x 12.7(D)mm

1	Cat.	Qty 1+	Qty 3+	Qty 6+
	ST-3193	\$12.95	\$11.35	\$10.35

Circular 36 x LED 190 Lumen **Cabinet Light with Touch Switch**

A stylish and compact LED Cabinet Light suitable for caravan, marine, 4WD, auto and domestic applications. Touch the aluminium casing to turn the light on and off. Screw mounting holes in base hidden behind removable aluminium trim for neat and easy installation.

- Input voltage: 9 30VDC (works on 12V and 24V systems)
- Uses 36pcs of 3528 SMD LEDs
- 190 Lumens
- 90° light output
- 3W power consumption
- Cool white 5500K colour temperature
- Dimensions: 70(Dia) x 9(H)mm



19 LED Caravan & Automotive Roof Light

An easy way to provide more illumination in your vehicle. It's a 12VDC powered circular roof light that makes use of 19 x white high brightness LEDs. Installation is simple, just wire it up to a power source and mount it to the roof. Features an

Dimensions: 147(Dia) x 36(H)mm

Power: 12VDC

on/off switch

Qty 10+ Cat. Qty 5+ SL-3446 \$34.95 \$31.45

24 LED Caravan Roof Light

with detachable front cover.

Replace your unreliable carayan or mobile home incandescent globes with this low power 24 LED roof light. It can be easily mounted to a roof with 4 screws (not supplied) to provide your interior with all the light it needs. The unit has a rear metal housing



Specifications	1100		No. of		
Voltage	12VDC	Mary Mary	William .		
Power	90W	1/6		interior para	Mada a
Colour Temperature	94500k	4	EFIR		
Dimensions	213(L) x 66(W) x 4	11.5(H)mm	RRRRITY		
7		Cat.	Qty 1+	Qty 5+	Qty 10+
	!	SL-3447	\$44.95	\$40.45	\$35.90

12VDC 16 Watt High Quality Twin Fluoro with Courtesy Lamp

This lamp may only have 2 x 8 watt tubes, but the light output is very high, compared to lower priced units. Designed for permanent installation in cars, boats, trucks & recreational vehicles

This is a very high quality unit and incorporates an efficient inverter to power the tubes. It is fitted with 2 x 8 watt fluorescent tubes. The twin fluoro provide as much light as a 75 watt incandescent globe yet consume only a fraction of the energy. The light is housed in a slim-line plastic case with an integral diffuser.

Requires 12VDC @ 820mA

• Overall dimensions: 390(L) x 85(W) x 25(D)mm



Qty 1+ \$29.95



Replacement Tube

MAINS OPERATED LIGHTING

8 LED Utility Light

Fluoro Light

Constructed beautifully with elegant U shaped bracket, this utility LED is light enough to hang from your wall or bedpost without trailing wires. Perfect as a reading light or for an easy way to highlight your favourite wall painting.

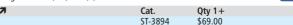
ST-3016



Qty 1 ST-3189

These lights will pay for themselves with its low power consumption. With 3 x 1W in each of the 3 puck lights; they can be surface mounted or recessed to fit into your decor. They're powered by a single plugpack with a distribution block on a 2 metre cable. Each light has 600mm cable length for fast and pain free installation.

- · Fashionable cool white colour
- More than 30,000 hours life
- Power supply 12VDC 1A
- Light size: 72(Dia) x 28(H)mm



Night Lights & Booklights

NIGHT LIGHTS

LED Night Light with Sensor

No need to trip over the cat or stub your toe when you need to get up in the middle of the when you lied to get up in the initiation of the night. Keep one of these plugged in and it will give you enough light to see where you're going. Being LED, it uses very little power, so you can leave it on permanently. The built-in sensor turns the light off whenever the room lights are switched on

- Ideal for kids room, hallways and closets
 Rotates through 360° to light any direction
- No batteries required
- Durable construction
- Unobtrusive size smaller than a double adaptor
- Dimensions: 50(Dia) x 50(H)mm







7	Cat.	Qty 1+	Qty 3+	Qty 6+
	ST-3181	\$9.95	\$8.75	\$7.75

Double Adaptor with Night Light

Leave a night light on for the kids without wasting a power point. When the lights go out, the light comes on so you can find your way to the little room or the kitchen for a midnight snack and it only uses a tiny 0.2W so it won't send the power bill through the roof. It can be left in place and you still have use of the power outlet.

- Light-sensitive
- Dimensions: 88(H) x 44(W) x 33(D)mm



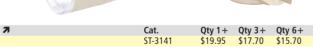
7	Cat.	Qty 1+	Qty 4+	Qty 10+
	PP-4039	\$9.95	\$8.75	\$7.75

Night Light With LED Torch

A product that smartly combines a night light and a 6 LED powered torch. The night light should be plugged into a vertical mains outlet with the torch docked in the

induction charging cradle. The beauty of induction charging means you can quickly whip the torch out without unplugging, disengaging or switching anything on or off. When you remove the torch from the dock it automatically switches on (you can manually switch it off or enable flashing mode as well). The night light base emits a soft but adequate white glow and has 3 modes of operation. The ON mode will keep the night light at the full setting at all times. The OFF mode is self explanatory and the auto mode will adjust the night lights lumen power depending on the surrounding light.





Motion Activated Sensor Light with LED

Multi purpose LED light with built-in infrared sensor designed to turn on automatically for 25 seconds when the PIR sensor detects movement (up to 4 metres away). Mount it to a suitable wall with the adjustable bracket & screws provided. You can also detach the light to double as a portable

- 3 modes (Torch, lamp, PIR)
- 3 x ultra-bright white LED
- Passive infra-red sensor
- Requires 3 x AA batteries
 Dimensions: 193(L) x 40(Dia)mm



3 in 1 Motion Sensor Light

Use it as a torch, a spotlight or as a motion sensor light! The torch/spotlight mode has a continuous run time where the motion sensor detects movement which then activates the lighting. You also have the option of angling the motion sensor and light to your requirements. It will switch on instantly after detecting motion and illuminate the area for either 30 or 60 seconds. It is compact enough to be mounted on any surface and has motion sensitivity of up to 5m. A great idea for areas such as your kitchen cupboards or pantry, sheds, hallways or even your letterbox! Mounting bracket and hardware



- Eco-friendly using LED & motion sensor
 Requires 2 x AA batteries
- Dimensions:106(L) x 92(H) x 33(D)mm

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	ST-3203	\$19.95	\$17.70	\$15.70

Solar Outdoor Wall Lamp With Sound Sensor

The perfect alternative to outdoor electrical lighting and ideal for illuminating your outdoor paths, walkways or as a spotlight above a garage door. It is weatherproof, heatproof and durable with over 12 hours run time in one day charge. The unit has a light and sound sensor and automatically turns on at low light levels and by sound. Easy to use and install with mounting bracket and screws included.

- Integrated designSolar panel 0.55WLi-ion battery 3.7V 800mAh
- 1W LED light
- Sound sensor
- Auto delay
- Expansion pillar hinge included
- Dimensions: 35(H)mm x 124(L)mm x 91(W)mm





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7	Cat.	Qty 1+	Qty 2+	Qty 4+
	SL-2767	\$29.95	\$26.90	\$23.70

BOOKLIGHTS

Ultra-light USB Charged Book Reading Light

This stylish book light recharges via your USB port. Flexible positioning, 180° rotatable. Weighs only 35g. Black only. It's supplied with two brackets, one for clipping onto your notebook monitor, the other for attaching to a book.

• Dimensions: 110(H) x 35(W) x 15(D)mm (less clip)



71	Cat.	Qty 1+	Qty 3+	Qty 6+
	ST-2817	\$6.95	\$6.25	\$5.50

Book Light with 2 Mode Operation

Designed to be portable and practical! This book light will give you more than enough light to read in bed but won't disturb your sleeping partner. The light has two brightness levels and uses a super bright 0.5W LED to fill your page with light and make reading a breeze. The slender design with its flexible gooseneck means you can position it any way required and makes a good companion on an overnight train or plane trip.

- On/Off switch with dimmer
- Requires 1 x AAA battery (not included) Size 40(W) x 105(L) x 10(D)mm
- Gooseneck length: 250mm long
- Cat Qty 6+ ST-3205 \$8.75 \$7.75





Solar Garden & Security Lights

GARDEN & OUTDOOR SECURITY LIGHTING

IP67 LED Landscape Spotlights

Add some luminescence to your outdoor or aquatic landscape. These lights are IP67 rated for complete protection against the weather, and are extremely robust so will last many years. They can even be mounted in a water feature or rock pool. Being LED, they use very little power and will last for thousands of hours. Each can be mounted on a surface with the included stand, or on the stout spike and thrust into the ground in a convenient location. Each has a 5m length of cable and extension cables are available. 1W or 3W types.

Cat SL-2755

Cat SL-2756

Cat \$1-2757

Cat SL-2754

Cat \$1-2759

Cat SL-2753

- Provides natural-looking light
- Energy efficient

1W IP67 LED	GARDEN	SPOT	LIGHT

• Equivalent to a 10 Watt halogen light

• Dimensions: 70(L) x 30(Dia)mm

3 X 1W IP67 LED GARDEN SPOTLIGHT

• Equivalent to a 20 Watt halogen light • Dimensions: 86(L) x 62(Dia)mm

POWER SUPPLY 12VAC 12W

POWER SUPPLY 12VAC 24W EXTENSION CABLE 5M SCREW LOCK

CABLE SPLITTER



Solar Rechargeable In-Ground LED Lights

Light up your path, garden, patio or any other outdoor area. Simply set into the ground and leave the sun to do its thing - they automatically recharge and come on when darkness descends. Ideal for safety, security or accent lighting. Stainless steel fascia.

- Robust aluminium construction
- No wiring, easy installation
 Dimensions: 140(W) x 48(H)mm

7	Cat.	Qty 1+	Qty 2+	Qty 4+
	SL-2751	\$34.95	\$31.45	\$27.90

Waterproof LEDs with 4.5m Cable

A pair of robust LED spotlights with a pre-attached 4.5m power cable. They're both waterproof so are ideal for installation in the garden to light up walkways, water features, or general garden ambience. They require a 12VDC power source so could also be adapted to automotive applications such as caravan lighting. Both models feature a threaded copper with chromium plated casing allowing them to be installed flush with a wall or footpath (may require the use of a hole saw).

SL-2747	SL-2749
1W	3W
1	1
1W	3W
85 lumens	150 lumens
3300K	3300K
12VDC	12VDC
45 degrees	120 degrees
37(Dia) x 41(D)mm	50(Dia) x 38(H)mm
4.5m	4.5m
IP68	IP68
	1W 1 1W 85 lumens 3300K 12VDC 45 degrees 37(Dia) x 41(D)mm 4.5m

1101		00	00			WARRANTU
7	Sold per pair		Cat.	Qty 1+	Qty 5+	Qty 10+
	1W		SL-2747	\$19.95	\$17.70	\$15.70
	3W		SL-2749	\$29.95	\$26.90	\$23.70













m		UEAR WARRANTY
Qty 1+	Qty 5+	Qty 10+
¢10 0E	¢17.70	¢15 70



CREE

\$63.95

Solar Powered 3W LED Sensor Lights

Most LED sensor lights available in the market just dont provide enough light output. These high powered CREE® LED solar sensor lights provide a very bright focused beam of light to sensor lights provide a very bright focused beam of light lilluminate your driveway, entry way or backyard.

Despite the extremely bright light output, they are still with exceptionally low power requirements. A waterproof solar panel is supplied with a 5m lead to keep the rechargeable batteries topped up. Each unit has a built-in PIR motion detector which automatically turns the light on from an adjustable pariod of Et a 20 ceased. A full welf surbright period of 5 to 20 seconds. A fully self sustained lighting kit; these are perfect for applications where mains power is unavailable. Stylish and smart in design, they are very simple and easy to install.

• Includes mounting hardware

3W CREE® LED SPOTLIGHT WITH ADJUSTABLE SWIVEL HEAD High output 3W LEDs for ultra bright light

Specifications	
Battery	Ni-MH battery
Detection range	100-180 degrees
Detection distance	8 metres
Solar light dimensions	95(L) x 240(H) x 137(D)mm
Solar panel dimensions	140(L) x 198(H) x 66(D)mm

2 X 3W CREE® LED SPOTLIGHTS WITH ADJUSTABLE SWIVEL HEADS

2 x high output 3W LEDs for ultra bright light

Specifications	
Battery	Ni-MH battery
Detection range	100-180 degrees
Detection distance	8 metres
Solar light dimensions	205(L) x 242(H) x 135(D)mm
Solar panel dimensions	140(L) x 198(H) x 66(D)mm

Two Spotlights

Joian parier anniensions	1-10(L) X 130(H) X 00(D)HIIII		
Cat. SL-2709		JEAR WARRANTY	
7	Cat.	Qty 1+	Qty 3+
One Spotlight	SL-2707	\$79.95	\$71.95



DID YOU KNOW...

Heinrich Gobel (18181 - 1893)

Is accredited with inventing the Incandescent Light Bulb and...

Freecall order hotline: 1800 022 888

Thomas Edison (1847 - 1931)

Invented the Electric Light Bulb and he set up the first industrial research laboratory in the world and was a world record holder of 1093 patents.

\$99.00

Solar Garden & Security Lights

GARDEN & OUTDOOR SECURITY LIGHTING (CONTINUED)

Battery Powered 2W LED Sensor Light

Illuminate your outdoor areas without the use mains electricity with this 2W CREE® LED sensor light. Easily mounts to any outdoor area, this light will give you up to 180 degrees of motion detection. The angle of the light and PIR detector are fully adjustable. With an adjustable "off" delay you can programme the unit to match your outdoor environment and needs. Using a 4 x C size batteries you can get up to 110 days of use before needing to change the batteries.

• Based on 20 seconds of light, 15 times per day using an alkaline battery

Specifications	
Output	1 x 2W High LED
Battery use	4 x C size batteries (not included)
PIR detection range	100-180 degrees
Power consumption	600mA (when on)
Dimensions	95(L) x 240(H) x 137(D)mm



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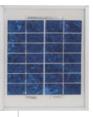
7	Cat.	Qty 1+	Qty 3+	Qty 6+
	SL-2711	\$34.95	\$31.45	\$27.90

SOLAR WATER PUMPS

Run your outdoor aquarium, garden pond or water feature from the sun, eliminating the need for wiring or the safety aspects of electricity near water. Each comes with its own solar panel, cable and pump assembly ready to go and has some electronic smarts built in to regulate the delivery of power during cloudy periods.

0.9W SOLAR WATER PUMP

Specifications	ZM-9200
Operating Voltage	7V
Power Consumption	0.9W
Flow Rate	140 litres/hour
Outlet Size	8mm
Cable Length	2m
Dimensions	
Solar Panel	188(L) x 155(W) x 25(H)mm
Pump Assembly:	42(L) x 39(W) x 28(H)mm





Pumps & Solar Panels not to scale

2.4W SOLAR WATER PUMP

Specifications	ZM-9202
Operating Voltage	12V
Power Consumption	2.4W
Flow Rate	200 litres/hour
Outlet Size	8mm
Cable Length	2m
Dimensions	
Solar Panel	308(L) x 166(W) x 25(H)mm
Pump Assembly	42(L) x 39(W) x 28(H)mm
4	



Pump Assembly	28(H)mm				UEAR WARRANTY
7		Cat.	Qty 1+	Qty 3+	Qty 6+
0.9W		ZM-9200	\$49.95	\$44.90	\$39.90
2.4W		ZM-9202	\$99.95	\$89.95	\$79.95

SOLAR GARDEN ACCESSORIES

Solar Powered Butterfly

A colourful full-sized butterfly hovering in your window box or garden when the sun comes out. When it doesn't a 1.5VxAA battery (not included) takes over. Includes solar cell, mounting spike and butterfly.

- · Battery extra.
- Dimensions: 450(H)mm





7	Cat.	Qty 1+	Qty 3+	Qty 6+
	GH-1834	\$19.95	\$17.70	\$15.70

SHED OR CARAVAN LIGHTING

Solar Lighting Kit -Low Power (LED)

Ideal for garages, gazebos and greenhouses. The solar panel is equipped with a swivel base that will allow for custom positioning for maximum light absorption. It is weatherproof able to withstand the harshest conditions. A total breeze to install. Pack includes solar panel and mounting bracket, 2.4m cable and rechargeable enclosed Ni-Cd battery.



- Rechargeable battery: 3.6V 600mAh Ni-Cd
- Solar panel dimensions: 175(W) x 127(H) x 15(D)mm
- Lamp dimensions: 180(W) x 62(H) x 50(D)mm



CANDLE SETS

Solar Rechargeable Candle

An ideal lighting solution for your next BBQ dinner or family gathering. Never worry about the mess and fuss of candle wax again. Simply turn it upside down to charge from the sun through a solar panel integrated in the bottom and when darkness falls, turn them over again and the LED candle will automatically come on. A fantastic



- No batteries required
- Long lasting
- Dimensions: Candle 92mm tall

71	Cat.	Qty 1+	Qty 3+	Qty 6+
	ST-3925	\$14.95	\$13.35	\$11.70

LED Tealight Candle Set of 12

Conventional candles are potentially hazardous in the family home. Today's technology has allowed us to experience a safe and convenient tealight without the smoke or messy wax. Battery operated & simple to use, these lights flicker just like real candles.

Ideal for any table, shelves, bedrooms, bathrooms or patios. Comes in a set of 12 individual candles.

- · Batteries included Long life LED



71	Cat.	Qty 1+	Qty 3+	Qty 6+
Set of 12	ST-3921	\$14.95	\$13.35	\$11.70

3 Piece Flameless LED Candle Set

Who needs conventional candles, when you can experience the safe and convenient LED light technology with this 3 piece Flameless LED Candle set. Featuring a soft yellow glow that flickers just like a conventional candle would. This is also made from real wax in which is nearly indistinguishable from a flamed candles. The candle sets also comes with a remote control to switch them on or off from a distance. This will make a nice set for the lounge room, dining table or even the bedroom.

- 3 Piece LED candles
- Wireless Remote
- Flameless Technology Wireless operation
- 3 x AAA included





7	Cat.	Qty 1+	Qty 3+	Qty 6+
	ST-3927	\$24.95	\$22.35	\$19.70

Home Automation - Overview

HOME AUTOMATION

This is a term where digital technology is used to simplify or integrate aspects of home management. Most home automation is designed to combine previously separate tasks into a central command & control workstation, typically a touch screen or even just a keypad. A PC can also form part of such a system.

Typical tasks that home automation can integrate are: interior & exterior lighting, air conditioning, audio & video feeds, telephone management, along with integration of home security including keyless entry, etc.

Previously home automation was limited to large expensive homes. Up until now home automation components were hard wired inside walls using Cat5-type cabling.

It is now possible to achieve the same thing without expensive & disruptive cabling using high security, high reliability wireless technology.

Jaycar is proud to be the pioneer of Home Automation-in-abox technology.

Wireless Gateway - Home Automation Controller

- Have you ever dreamt of controlling your homes lighting and appliances remotely?
- Have you ever wanted to turn your homes lights and appliances off and
- activate your security system with the touch of one button? Have you ever been on holidays and wanted to check on your home via video and be updated via Email and SMS* of any events?

 The answer is here! This new advanced Wireless Gateway Home Automation

SECURITY ALARM FUNCTION

Real Time / Emergency Notifications Via Email and SMS*

Control Center can bring these dreams into reality.

- Home Automation Control Timers, scene control, remote operation
 Video Surveillance IP cameras support for live video monitoring
- Cost Effective True wireless connectivity
- Easy Installation DIY simple installation.

Fully secure your home with the LA-5570 Wireless Gateway. Featuring a wide range of wireless accessories such as door and window switches, PIR motion detectors and smoke detectors. You can easily build up a fully secure home environment to protect your home, family and property. Use either the wireless digital pulse input or the analogue input modules to connect a range of hard wired security sensors.

REAL TIME EVENT / EMERGENCY NOTIFICATION

The LA-5570 Wireless Gateway provides real time email and SMS* notification allowing you to be immediately informed of an break in or panic notification. requires options GSM module.

AUTOMATION

Your LA-5570 Wireless Gateway is more than a fancy security system. It offers total control of your home appliances, lighting and power outlets. The LA-5570 can control your entire home allowing you to monitor and control appliances remotely via your iPhone® or web browser.

Have you ever forgotten to turn off the iron? Now you can simply pick up your phone and switch of the appliances off from anywhere in the world. Going on holidays? Your LA-5570 can turn on and off lighting at various times so that it appears someone is at home. When you are at home and want to sit down and enjoy a movie on the big screen, at the press of a button, the lights will dim, the popcorn machine turns on and the movie begins.

VIDEO SURVEILLANCE

Need to check on the dog? Make sure the teenagers are behaving while out to dinner? Through the Web user interface or you iPhone you can easily monitor and control your IP cameras, allowing you to easily monitor live video footage of your home anytime anywhere.

Most professional home automation systems require your home to be pre wired costing many thousands of dollars just for the install! But with the LA-5570 Wireless Gateway, it can offer you the same level of functionality and its all DIY! The system uses premium wireless technologies such as Wi-Fi, Zigbee and 3GPP mobile technologies to provide a very cost effective DIY solution.

FASY INSTALL

The system uses premium wireless technologies such as Wi-Fi, Zigbee and 3GPP mobile technologies connecting all the devices such as the door sensors, PIR movement detectors, smoke detectors, temperature monitor, plug in appliance switch all remotely without wires. Providing a very cost effective, DIY solution.

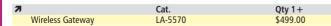
Typical ZigBee Wireless Home Automation System Map



WIRELESS SPECIFICATION COMPARISON

Feature	WiFi (802.11x)	Bluetooth®	UIS (ZigBee Pro)
reature	WIFT (002.11X)	Diuetootti	Olo (Zigbee Pro)
Battery life	Several hours	Several days	1 year and above
Complexity	High complexity	Complex	Simple
Number of Nodes	32	7	20~300
Response time communication	3 seconds	10 seconds	30 milliseconds
Coverage	100m	10m	300m and above
Extension	Roaming enable	no	Yes
Data Rate	11Mbps	1Mbps	250kbps
Security	SSID	64-bit,128-bit	AES/128-bit
Address Type	48-bit (MAC-48)	48-bit (MAC-48)	64-bit





Freecall order hotline: 1800 022 888

Qty 2+ \$449.00 \$399.00



Home Automation - Coordinators & Switches

Wireless LCD Controller with PSU

The wireless remote keypad allows for complete configuration and programming the LA-5570 Wireless Gateway. This remote has the look and feel of a typical alarm keypad with the extra functionality of controlling your lighting appliances.

- Away Mode Full Arming for All Zones
 Stay Mode For Arming certain Zones for Night Mode
- Zone Bypass function
- Panic button Emergency Alarm Activation (Can send Email or SMS)
 Tamper switch Activates Alarm if removed from the wall when Armed

- Simple to use navigation menus
 Powered by 2x AA batteries and mains adaptor
 Simply mount on the wall with the supplied mounting plate
- Dimensions: 157(L) x 95(W) x 21.5(H)mm







Cat. Qty 1+ Qty 4+ \$179.00 LA-5572 \$160.95 \$142.95







Remote Control

Miniature and slim line 3 button key fob remote control for use with our range of Home Automation devices. Quickly arm and disarm sensors, turn on lights, open doors and also integrates a panic button for emergencies.

Buttons, arm, disarm and panic

Specifications	
Power Supply	CR2032
Communication range	100 metres
Protocol	2.4GHz UIS
Battery life	2 years
Dimensions	64(L) x 30(W) x 13(D)mm



Qty 4+ Qty 1+ Qty 2+ LA-5573 \$26.90

Quad Band GSM Dialler Module

This quad band GSM Dialler module expands the functionality of our LA-5570 Wireless Gateway to allow access from a 3G enabled mobile phone. Interfaces with the Wireless Home Automation Gateway and translates event logs to SMS message which is sent to programmed numbers. Also works in reverse and is able to decode SMS commands to control the wireless gateway.









7	Cat.	Qty 1+	Qty 2+	Qty 4+	NI FER
	ΙΔ-5574	\$249.00	\$225.00	\$198.95	WARRANTY





Wireless Mains Controller

A 240VAC plug in mains controller that is able to remotely activate any mains appliances. Turn lights on and off, motors, heaters, etc wirelessly via the Gateway or remote control devices.

Specifications	
Power Supply	230VAC 50Hz
Resistive Load	6.4A
Communication range	100 metres
Protocol	2.4GHz UIS
Battery life	2 years
Dimensions	88(L) x 52(W) x 39(D)mm



7	Cat.	Qty 1+	Qty 2+	Qty 4+
	LA-5578	\$69.95	\$62.95	\$55.95

Wireless 12VDC Switch Controller

A 12VDC Controller switch suitable for use with Garage doors and door strikes. It can also be used for switching other devices with a 12V control input such as lamps, cameras, etc. It has a magnet on the rear which enables easy fixture to metal surfaces.

Specifications	
Power Supply	12VDC
Current	20mA
Communication range	100 metres
Protocol	2.4GHz UIS
Battery life	2 years
Dimensions	88(L) x 39(W) x 15(D)mm



7	Cat.	Qty 1+	Qty 2+	Qty 4+
	LA-5580	\$49.95	\$44.90	\$39.90





Home Automation - Switches

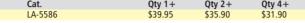
Wireless Temperature Sensor

This wireless temperature sensor has an operating temperature of 20 to 60 degree centigrade. Monitor the exact temperature in each room, garage and even the wine cellar. Unit incorporates minimum and maximum temperature threshold which allows for alarm or mains controller activation.

Specifications	
Power Supply	CR2032
Temperature range	20 - 60 degrees Celsius
Communication range	100 metres
Protocol	2.4GHz UIS
Battery life	2 years
Dimensions	100(D) x 43(H)mm







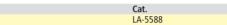




Wireless Digital Transducer

A nifty wireless transducer for digital input interface with our wireless home Automation system. This device enables you to connect existing digital sensors with normally open and normally closed contact such as PIR's, Reed Switches, Smoke and Gas detectors, etc already in your house hold and offices. Has a strong magnet on the rear of the unit for easy mounting on metal surfaces.

Specifications	
Power Supply	CR2032
Detection	NO/NC contacts
Communication range	100 metres
Protocol	2.4GHz UIS
Battery life	2 years
Dimensions	79(L) x 39(W) x 15(D)mm







Wireless PIR Sensor

Our new range of Home Automation products also integrates alarm monitoring functionality. This Wireless PIR sensor further expands the capabilities of our Home Automation range by offering reliable motion detection. Like all PIR detectors, this unit detect infra-red radiation in 95 degree up to a distance of 5 metres. Uses 2 x AA batteries and has energy saving mode which can last up to 2 years of operation.

Specifications	
Power Supply	2 x AA (not included)
Detection	Passive Infra-red
Communication range	100 metres
Protocol	2.4GHz UIS
Battery life	2 years
Dimensions	92(L) x 34(W) x 34(D)mm













Wireless Magnetic Reed Switch

This compact wireless reed switch interfaces with our Home Automation system allowing entry protection from windows and doors. Supplied with a mounting bracket for the main wireless switch, the magnet screws onto door or window frames. Also has power saving mode which enables the battery to last up to 2 years.

Specifications	
Power Supply	CR2032
Detection	Passive Infra-red
Communication range	100 metres
Protocol	2.4GHz UIS
Battery life	2 years
Dimensions	65(L) x 34(W) x 15(D)mm Main
Difficusions	70(L) x 12(W) x 15(D)mm Magnet



7	Cat.	Qty 1+	Qty 2+	Qty 4+	
	ΙΛ 550/	\$20.05	\$25.00	\$21.00	

Wireless Smoke Sensor with Siren

A complete wireless photoelectric smoke detector with a built in buzzer providing audible warning. A highly reliable sensor which provides a complete solution to fire prevention and safety. Supplied with mounting hardware for roof mounting. Powered by 2 x AA batteries and has power saving mode for 2 years of operation.

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Specifications	
Power Supply	2 x AA (not included)
Detection	Passive Infrared
Communication range	100 metres
Protocol	2.4GHz UIS
Siren Output	90dB @ 1m
Battery life	2 years
Dimensions	100(D) x 43(H)mm



Qty 1+ \$39.95



7	Cat.	Qty 1+	Qty 2+	Qty 4+
	LA-5587	\$59.95	\$53.95	\$47.90

Freecall order hotline: 1800 022 888





Wireless Siren

A 240V AC plug in siren designed to receive signals from our range of Home Automation sensors. Unit can interface with wireless PIR detectors, reed switches and smoke detectors. Has a sound output of 85dB and also an LED visual indication on the front panel.

Specifications	
Power Supply	240VAC 50Hz
Sound Output	90dB @ 1 metre
Communication range	
Protocol	2.4GHz UIS
Battery life	2 years
Dimensions	88(L) x 52(W) x 39(D)mm



7	Cat.	Qty 1+	Qty 2+	Qty 4+
	LA-5576	\$89.00	\$79.95	\$70.95

Security & Surveillance

The DVRs get more powerful & cheaper, the cameras get better optics & video performance, and the DVR/camera packages just get better and better. This is part of the theme for 2012

We also have some amazing small cameras for model helicopter & other covert surveillance applications.

Our range of security products have been refined along with new intercoms & more.

And finally, you must check out the new time-lapse/motion activated HIGH DEFINITION surveillance cameras on page 465. They will revolutionise surveillance.



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DVR & Camera Kits	470
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DVRs - Professional	473
Home Alarms & Accessories	449



MOTION SENSOR ALARMS

Motion Sensor Alarm with Solar Panel

Protect your home with this simple and easy to use solar powered alarm without the hassles of running wires through your wall or ceiling cavities. After programming a 4 digit security code, it can be armed or disarmed using the built in keypad. Secures an area of up to 8 metres with it's built in PIR sensor which triggers the siren once movement is detected. This unit incorporates battery backup power for staying armed during night time. The solar panel provides sufficient power for standby use during the day.

- · Low battery indicator
- Mounting hardware included

mountaing natural continued					
Specifications					
Alarm	130dB				
Standby current	20μΑ				
Entry/Exit Delay	5/30 Seconds				
PIR Angle	120° Vertical, 60° Horizontal				
Backup battery	3 x AA batteries (required)				
Dimensions	116(H) x 70(W) x 33(D)mm				



Qty 1+	Qty 2+	Qty 4+
\$19.95	\$17.70	\$15.70

Motion Sensor Alarm with Video Recording

This 2-in-1 motion sensor alarm with an inbuilt video camera, records up to 2 hours of video/audio onto the included 4GB SD Card. 12 IR LEDs allows the unit to record at night. Secures an area of up to 8 metres with anows the unit to record at night. Secures an area of up to 8 metres with it's built in PIR sensor which triggers the siren once movement is detected. This unit incorporates battery backup power for staying armed during night time. The solar panel provides sufficient power for standby use during the day. The alarm can be armed or disarmed using the supplied infrared remote control. Watch the recorded footage directly on your TV using the AV cable supplied.

- · Low battery indicator
- Supports up to 32GB SD Card (1GB Records 30 mins)
 Video deletion function
- Mute audio from the camera

Alarm Specifications				
Siren	130dB			
Standby current	50μA			
Battery backup	3 x AA batteries (included)			
Entry/Exit Delay	5/30 Seconds			
PIR Angle	120° Vertical, 60° Horizontal			
Remote batteries	3 x LR44 (included)			
Dimensions	116(H) x 70(W) x 33(D)mm			
Camera Specifications				

Image Sensor	CMOS	
Resolution	480 TV lines	1
Pixels	640(H) x 480(V)	
7		_





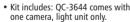
Qty 1+	Qty 2+	Qty 4+
\$99.00	\$88.95	\$83.95

7	Cat.	Qty 1+	Qty 2+	Qty 4+	71	Cat.
	LA-5216	\$19.95	\$17.70	\$15.70		QC-8016

WIRELESS DVR KIT

Wireless DVR Kit with Solar Powered 2.4GHz Digital Wireless Camera, PIR Sensor & 2 x 5W LED Lights

Keep the perimeter of your home or business secure with this easy to install wireless DVR kit. The integrated PIR sensor provides reliable motion detection, triggering both the camera and 2 x 5W LED lights (when dark). Video is transmitted wirelessly and a 3W monocrystalline solar panel keep the batteries charged, so it can be installed in areas where it is too difficult to run wires. The DVR accepts up to four cameras, which can be monitored one at a time or in a quad view. The camera can be motion or voice activated and set to record up to ten seconds of video or take a snapshot.



Spare camera to suit QC-3646

Camera, light	
Rechargeable battery	7.4V/2200mAh Li-ion battery
Solar Panel	12V/3W monocrystalline
Transmission frequency	ISM 2400 2483.5MHz
Modulation mode	GFSK
RF Rate	3Mbps
Transmission power	20dB
Transmission distance	up to 150m
Lumens	Up to 600
Colour Temperature	6000K 7000K
IR night-vision lamp	
Motion detection range	up to 15m, 160° wide
Encoding	H.264 at 480x272, 25fps
Built-in microphone	
Lamp dimension (fully	290(L) x 215(W) x 118(D)mm
extended with antenna)	===(=, :: = := (:1) // 110(b):::::
Solar panel dimension	187(L) x 175(W) x 30(D)mm
(including bracket)	1 , , , , , , ,

Software

- · Single or guad view
- Audio monitoring
- Video zoom supportVoice activated recording
- · Motion activated recording
- · Alarm support
- Photo album support
- Record audio and videoPlayback audio and video

· Multinational language support

DVR		
Transmission frequency	ISM 2400 2483.5MHz	
Modulation mode	GFSK	
RF rate	3Mbps	
Transmission power	20dB	(6)
Transmission distance	300m	-
Video-out resolution	720x576, 720x480	
Encoding	H.264 at 480x272, 25fps	
SD memory card	1GB to 32GB (2GB SD card included)	
Speaker function for voice	communication	
Quad view resolution	240x136, 60fps (each camera)	
Dimensions (including base and antenna)	207(L) x 92(W) x 77(D)mm	

Solar panel dimension (including bracket)		187(L) x 175(W) x 30(D)mm	Dimensions (including base and antenna)	207(L) x 92(W) x 77(D)mm	1
7	l	Cat.	Qty 1+	Qty 2+	Qty 4+
	DVR Camera Kit	QC-3644	\$299.00	\$269.00	\$255.00
	Spare Camera	QC-3646	\$199.00	\$178.95	\$168.95
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Home Alarm Systems – Wireless

8 Zone Wireless Alarm Kit

Installing an alarm system can be a costly business, often a lot more than the hardware itself. Installing this wireless system takes care of that, as you can install the whole thing yourself, without needing to run wires behind walls, ceilings or under floors. It features key fob remote control, backlit LCD control panel with three colour-coded indicators of system status. Everything you need to get a basic system in your home or office is included in the kit, with spare sensors available so you can expand the system as you need to:

- 8 zones
- Backlit LCD
- 4 operation modes
 Low battery indicator
- Back-up battery (9V battery)
- 120dB siren
- Keyfob remote with
- panic button
 No programming required

KIT INCLUDES:

- · LCD control panel
- Kev fob remote
- PIR sensor

SURVEILLAND

SECURITY E

• 2 x reed switch sensors for doors or windows

Spare sensors and accessories: **INDOOR 120DB SIREN** WIRELESS PIR SENSOR WIRELESS REED SWITCH WIRELESS SIREN BELLBOX WIRELESS KEY FOB REMOTE TELEPHONE DIALLER (AUSTRALIAN ONLY)



LA-5142









7		Cat.	Qty 1+	Qty 2+	Qty 4+	
	8 Zone Wireless Alarm Kit	LA-5145	\$179.00	\$160.95	\$142.95	
	Additional Wireless Reed Switch	LA-5147	\$29.95	\$26.90	\$23.70	
	Additional Wireless Keyfob Remote	LA-5149	\$29.95	\$26.90	\$23.70	
	Wireless Indoor 120dB Siren	LA-5142	\$39.95	\$35.90	\$31.90	
	Wireless PIR Sensor	LA-5146	\$39.95	\$35.90	\$31.90	
	Wireless Siren Bellbox	LA-5148	\$99.00	\$88.95	\$78.95	
	Telephone Dialler	LA-5133	\$99.00	\$88.95	\$78.95	

8 Zone Wireless Alarm Kit

Wireless alarms are a great way to add security to your house, apartment or business without the daunting and invasive process of running cables everywhere. They're also an ideal solution for anyone in rented or temporary premises. The system "learns" what sensors are connected and the part arm function allows you to protect certain zones while others are disarmed. This is handy for keeping the rest of the house protected at night while everyone's asleep. The kit has everything you need to make your place

- 8-zones
- 3 mode arming
- Battery backup
 Learning function Panic alarm

- KIT INCLUDES: Siren and bellbox
- Kevpad
- PIR sensor
- Reed switch
- 9V plugpack



Reed Switch Sensor

Frequency Transmission range

Control Unit	
Zones	8 alarm zones,
Zulles	1 sensor per zone
Entry/exit delay	30 seconds
Siren duration	3 minutes
Receiver frequency	433MHz
Power supply	15V 500mA,
Back-up battery life	Up to 16 hours
PIR Sensor	
Mounting height	2 - 2.5m
Detection range	12m
Frequency	433MHz
Transmission range	100m
Power supply	2 x AA batteries
Typical battery life	18 months

Spares and accessories:	
PIR SENSOR	Cat LA-5151
REED SWITCH	Cat LA-5152
BATTERY PACK	Cat LA-5154
REMOTE CONTROL	Cat LA-5155
KEY FOB	







433MHz



7		Cat.	Qty 1+	Qty 2+	Qty 4+
	8 Zone Wireless Alarm Kit	LA-5150	\$169.00	\$151.95	\$134.95
	PIR Sensor	LA-5151	\$29.95	\$26.90	\$23.70
	Reed Switch	LA-5152	\$24.95	\$22.35	\$19.70
	Battery Pack	LA-5154	\$9.95	\$8.75	\$7.75
	Remote Control Key Fob	LA-5155	\$19.95	\$17.70	\$15.70

9 Zone Intelligent GSM Wireless Alarm System

Security systems are only good if they can alert someone when they're tripped, and even the loudest siren is quiet as a mouse if nobody is nearby to hear it. Sure, you can subscribe to a monitoring service, but they can be very costly. This brilliant system incorporates a quad band GSM module to notify you by phone and SMS when the alarm is triggered

The system is easy to set up and to operate, utilising wireless PIR detectors and reed switches, so there is virtually no wiring at all. Fully featured with up to nine zones, remote arm and disarm function and battery backup. This system allows you to cater for all your security needs in one system while giving you peace of mind. Supplied with the alarm control unit, loud 120dB siren, a wireless PIR detector and wireless reed switch and two wireless remote controls

- Alarm trip notification via GSM network no phone lines required
 Notifies up to three programmed numbers by phone and SMS
 Wireless PIR and reed switch units no wiring required

I A-5147

- Alarm response time less than 10 seconds
 Up to 9 separate zones
- · Battery backup in case of power failure
- Mains power supply included

Cat. LA-5156

KIT INCLUDES:

- · Wireless alarm panel • 1 x external siren
- 2 x wireless remote controls
- 1 x wireless PIR 1 x reed switch

ADDITIONAL PIR DETECTOR

Requires 9VDC battery Cat. LA-5157

ADDITIONAL WIRELESS REED SWITCHES TO SUIT LA-5156 Cat. LA-5158

Freecall order hotline: 1800 022 888

7		Cat.	Qty 1+	Qty 2+	Qty 4+
	Alarm System	LA-5156	\$299.00	\$269.00	\$239.00
	Additional PIR Detector	LA-5157	\$49.95	\$44.90	\$39.90
	Additional Wireles Reed Switches	LA-5158	\$39.95	\$35.90	\$31.90









Home Alarm Systems - Wired

ALARM SYSTEMS - WIRED

Shed Alarm - Wired

Simple and effective garage or shed alarm. Consisting of a keypad and single reed switch for a door or window and 5m of cable for easy DIY installation. It can be used as an instant alarm, with an entry delay or as a door chime to announce entry. Powered by a single 9V battery. (not included)

• Dimensions: 162(H) x 85(W) x 32(D)mm

KIT INCLUDES:

- Keypad
- 5m cable









Cat.	Qty 1+	Qty 2+	Qty 4+
LA-5214	\$19.95	\$17.70	\$15.70

2 Zone Alarm Kit

Simple two zone, two wire alarm for small to medium size premises. Everything you need to protect a small house or home unit is included - one passive infrared sensor for large areas and a reed switch for one entry point such as a door or window. It also has the visible deterrent of an external siren box and additional sensors can be added if required. Easy to use and install with all fixings included.

KIT INCLUDES:



7		Cat.	Qty 1+	Qty 2+	Qty 4+
	2 Zone Alarm Kit	LA-5480	\$89.00	\$79.95	\$70.95
	Additional PIR Sensor	LA-5481	\$24.95	\$22.35	\$19.70

4 Sector Security Alarm System with 2 Wire Technology

At last a user friendly 4 sector alarm system that is easy to set-up and provides exceptional levels of security. The system utilises two-wire technology to ensure simple set-up that the DIY enthusiasts will love. The control unit has a built-in keypad with status LEDs and a three modes or operation (Home, Out, Off). All sensors and sounders are line-protected so any attempt to interfere will sound the alarm.

4 Alarm Sectors (Expandable by

Dual Pyroelectric elemen

with hemispherical lens

and new two-wire



Kit includes: control unit, two movement detector PIRs, four door/window contact, external siren strobe, 240VAC adaptor, 50m two-core flat wire and clips and screw/wall plug packs.



Set up multiple sectors which can be monitored or enabled

independently (eg. upstairs/downstairs or house & garage etc.)

- All system components (sensors, sirens) are connected to the control
 unit via a two-core non-polarflat wire
- Low battery and tamper attempts will be indicated by the status LEDs
 Push button "Home", "Out", and "Off" mode operation or "Home" and
 "Out" modes are pre-programmed for user convenience
- Door chime function is available when system is not armed
 Short circuit tamper attacks to any sector sensor will trigger the alarm
- Individual sectors can be set to "Home-Bypass" or "Bypass"; for example, the upstairs detectors can be set to "Home-Bypass" at night
 Two PIR motion detectors can be connected to each PIR sensor circuit
- · The system can be expanded to have four PIRs as well as many magnetic contacts

• Control Unit

- 2 x PIRs
- 4 x Reed Switches
- External Siren
- 50m two-core flat cable240V adaptor











connecting 2 PIRs to each of Sectors 3 and 4)						
15, 30, 45 seconds						
1, 3,10 minutes pro	ogrammable					
12V						
160(H) x 185(W) x 3	35(D)mm					
Specifications - External Siren Unit						
roelectric element	Type	Piezo electronic external siren				

Microprocessor based control unit with new two-wire technology

Housing

	, 155
Siren Output	110dB min. at 1m
Size	180(H) x 113(W) x 47(D)mm
Specifications -	Door/Window Contact Detector
Specifications - Type	Door/Window Contact Detector Magnetically - actuated switch

Spare PIRs sold separately:

Specifications - Control Unit

Entry/Exit Delay

Siren/Strobe Outputs

Specifications - PIR

Siren Duration

ABS

2 WIRE PIR TO SUIT LA-5475

This 2 wire PIR is a dual-element passive infrared intrusion detector for use in electronic security systems. It is compact, attractive and easy to install. It can be mounted indoors in a corner and is ideal for commercial, office and residential installation. The unit detection is via monitoring changes in infrared energy patterns.







IΑ.	-54	17

Qty 2+	Qty 4+
\$106.95	\$94.95
\$26.90	\$23.70
\$6.25	\$5.50

7		Cat.	Qty 1+	Qty 2+	Qty 4+	
	4 Zone Alarm System	LA-5475	\$119.00	\$106.95	\$94.95	
	Additional 2 Wire PIR	LA-5476	\$29.95	\$26.90	\$23.70	
	PIR Lens - Lens Curtain	LA-5473	\$6.95	\$6.25	\$5.50	
	PIR Lens - Pet Alley	LA-5471	\$6.95	\$6.25	\$5.50	

WIRED ALARM SYSTEMS (CONTINUED)

10 Zone Alarm Kits

Fully configurable and programmable, these alarm kits give you complete control over a professional system for home or business. Each comes with a central controller and the sensors you need to get a basic system up and running, then you can add sensors and functionality as required. Up to four remote keypads can be installed at up to 100m

- 10 programmable zones
- 4 access levels
- · Walk test mode
- Events memory in keypads
- · Programmable timers for entry, exit and alarm duration









Two models to choose from

10 ZONE ALARM WITH LED CONTROLLER Cat LA-5560

KIT INCLUDES:

- 1 x Control panel 1 x Remote LED controller
- 2 x PIR sensors
- 1 x Reed Switch 1 x Bellbox

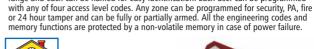
姐

1 x 50m 6 core cable

1 x 12V 1.2Ah backup



LA-5560







10 ZONE ALARM WITH LCD CONTROLLER

Cat LA-5562

KIT INCLUDES:

- 1 x Control panel
- 1 x Remote LCD controller
- 4 x PIR sensors
- 2 x Reed Switch
- 1 x Bellbox
- 1 x Internal siren





range and each can be named for easy identification. Each user can be programmed

7		Cat.	Qty 1+	Qty 2+	Qty 4+
	LED Alarm Kit with 2 PIRs	LA-5560	\$249.00	\$225.00	\$198.95
	LCD Alarm Kit with 4 PIRs	LA-5562	\$349.00	\$315.00	\$279.00
7	Sensors & Accessories	Cat.	Qty 1+	Qty 4+	Qty 8+
	LED Keypad - suits LA-5560	LA-5561	\$49.95	\$44.90	\$39.90
	LCD Keypad - suits LA-5562	LA-5563	\$69.95	\$62.95	\$55.95
	PIR - suits both LA-5560 & 62	LA-5564	\$29.95	\$26.90	\$23.70

10 Sector Intelligent Alarm System with Optional Dialler

Fully configurable and programmable, this professional alarm panel is the most advanced version of our 10 zone alarm controllers. Boasting an impressive range of features above our standard alarm systems, the LA-5368 alarm panel gives you everything required for advanced alarm installations. Standard features include support for up to four individual named keypads at a maximum range of 100m from the controller, four access levels of user codes with flexibility to program any zone as security, PA, fire or 24 hour tamper. Advanced features include more programming flexibility during installation and support for optional accessories; wireless sensor adaptor and GSM dialler.

Designed with the flexibility to suit the requirements of many different installations, it is supplied as a control panel only. Additional components, sensors and accessories are available to cater for specific applications.

• Dimensions: 270(W) x 215(H) x 57(D)mm Cat. LA-5368

Accessories - sold separately:
• LED Keypad

Cat. LA-5561 LCD Keypad Cat. LA-5563 GSM Dialler Module Cat 1 A-5369 Wireless Sensor Adaptor Cat. LA-5367

 12V 1.3Ah Backup Battery Cat. S
 Suits standard PIR and Reed switches Cat. SB-2480

COMPATABLE SENSORS & CONTROLLERS

Wireless PIR Sensor Cat LA-5151 · Wireless Reed Switch Cat LA-5152 · Remote Control Key Fob Cat LA-5155



LA-5368

GSM INTERFACE MODULE FOR LA-5368 ALARM SYSTEM

Don't leave your alarm screaming for attention when you can't hear it! This powerful unit interfaces with the LA-5368 8-sector alarm system to enable even more features. The unit allows the alarm system to receive commands and send notifications via SMS over the GSM network. It can store up to three mobile phone numbers, which are then notified if the alarm is triggered. A great feature is the remote arm/disarm function. It allows you to send an SMS (from an authorised number) to arm and/or disarm the panel remotely. No worrying about "Did I turn the alarm on?" when you head on holidays, or late night trips to the office to check it's secure. Simply send an SMS and it's done!

• Features tamper protection, and is powered by the LA-5368 alarm system.

Cat. LA-5369



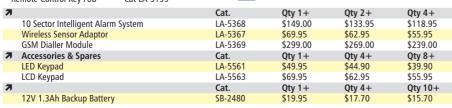




WIRELESS SENSOR ADAPTOR FOR LA-5368

Connect this module to the LA-5368 Intelligent 8 Sector Alarm System to enable the addition of wireless sensors and remote control key fobs to your wired alarm system. Ideal for businesses and residences with detached workshops or garages. Also works well for rooms which are unable to be reached by cables. Unit is powered from the LA5368 alarm panel. Sensors and key fobs sold separately.

• Dimensions: 150(H) x 100(W) x 30(D)mm Cat. LA-5367



Freecall order hotline: 1800 022 888

I A-5367

Home Alarm - Accessories

Installing a Home Alarm Security System

Installing home security can be a daunting task so spending time with this guide will almost certainly save you time and

motion detectors for maximum efficiency, now to identify potential entry points for thieves, using sensors and switches plus basic cabling and installation. If you're looking to purchase and install an alarm for the first time,

frustration. It clearly explains how to plan positioning of motion detectors for maximum efficiency, how to identify

ALARM PANEL ACCESSORIES

Alarm Relay Module 2 x 15A

When it comes to large alarm installations, there is often a requirement to have several sirens and strobe lights. In order to do this safely, the best way is to use an isolated relay module. This enables you to supply an external power source so as not to overload the power supply on the alarm panel and switch high currents to multiple sirens and strobe lights.

- · 15A Switching current
- Easy connection via wire terminals
 NO and NC contacts
- Isolated to protect the alarm panel
- · Relay coil protection for spike free operation

7	Cat.	Qty 1+	Qty 4+	Qty 8+
	LA-5558	\$19.95	\$17.70	\$15.70



WARNING STICKERS

this guide is essential reading.

A4 8 pages

Large Alarm Sticker

For trucks, caravans, houses, offices and factories. Where a larger and more prominent deterrent sticker is required.

 Sticks to outside of window. Dimensions: 120 x 80mm



✓ home securit

Cat.

RI-8205



WARNING

Otv 1+

7	Cat.	Qty 1+	Qty 4+	Qty 8-
	LA-5102	\$2.95	\$2.60	\$2.30

RELATED PRODUCT

ALARM POWER SUPPLIES

16VAC 1.25 Amp Alarm Supply

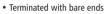
Designed for use with many house alarm panels. Supplied with three metres of cable for connection to alarm.

- Terminated with bare ends
- Dimensions: 55(W) x 90(H) x 60(D)mm

Voltage(AC)	Current(A)	Approval	Cat.	Qty 1+	Qty 5+	Qty 10+
16	1.25	N13057	MP-3021	\$23.95	\$21.35	\$18.95

17VAC 1.25 Amp - Earth Connected

This has the earth pin wire connected. This is used for alarm panels that have an inbuilt dialler, as Austel require earthing due to it being connected to the telephone system.





7	Voltage(AC)	Current(A)	Approval	Cat.	Qty 1+	Qty 5+	Qty 10+
	17	1 25	N13057	MD-3033	\$24.05	\$22.35	\$10.70

SHOCK SENSORS

SMART SHOCK SENSOR

A modern designed alarm vibration or shock sensor that has a wide dynamic range with high/low sensitivity settings. It is lightweight, fast and easy to install and can be mounted to wood, steel, glass, and concrete. Also includes latching and non latching modes and red LED indicator.

Specifications	LA-5071
Supply Voltage	9V - 16V DC
Current: Normal Mode	15mA at 12V / Alarm: 18mA at 12V
Operating Temperature	-10°C to +55°C
Relative Humidity at 30°C	0 - 90%
Pulse Count	Selectable one or two pulses
Relay Contact Resistance	150mA 24V Resistive 10 Ohms 1/10Watts
Dimensions	27(L) x 22(W) x 87(H)mm

INTELLIGENT SHOCK SENSOR

This vibration/shock sensor has an intelligent microprocessor. The sensitivity is automatically set in Learn Mode by the level of a recognised impact made to the protected area. The number of impacts i.e. pulse count required to generate an alarm is determined by the number of the recognised impacts made in Learn Mode. Fast and easy to install and can

be mounted to wood, steel, glass, and concrete.

Specifications	LA-5073
Supply Voltage	9V - 16V DC
Current: Normal Mode	16.5mA / Alarm: 15.8mA
Operating Temperature	-20°C to +50°C
Relative Humidity	30°C: 0 - 90%
Pulse Count	1 - 8 Programmed in Learn Mode
Latching Modes	Any, First to Alarm, Sequential
Sensitivity Settings	Automatic from Learn Mode Impact
Indicator	Two colour LED
Dimensions	27(L) x 22(W) x 87(H)mm

7	Cat.	Qty 1+	Qty 4+	Qty 8+
12V Pulse Count	LA-5071	\$34.95	\$31.45	\$27.90
12V Intelligent Pulse	LA-5073	\$44.95	\$40.45	\$35.90



Cost-effective and simple security measure. Use one or more as a stand-alone option or as an addition to an existing electronic security setup. Simply peel the clear backing from the self-adhesive mount and position on the inside of a window - no tools required. The solar cell keeps the built-in Ni-MH battery charged and if triggered, the very loud alarm sounds.

Two types are available. Suitable for windows, French doors, sliding glass doors and pane glass doors.

- Warning sticker included
- No wiring Never needs batteries
- Self-adhesive
- Dimensions: 70(W) x 82(H) x 8(D)mm

MINI GLASS BREAKAGE/ VIBRATION Cat LA-5003

MINI MAGNETIC ENTRY

Cat LA-5005



FITS ON INSIDE

OF WINDOWS

	Cat.	Qty 1+	Qty 4+	Qty 8+
Glass Break / Vibration Alarm	LA-5003	\$19.95	\$17.70	\$15.70
Magnetic Entry Alarm	LA-5005	\$19.95	\$17.70	\$15.70

Surveillance Warning Stickers

Make sure people entering your premises know that they will be under video surveillance with this unambiguous message.

INSIDE SURVEILLANCE WARNING STICKER

- UV stabilised for long life
- Black printing on a clear background
 Sticks to inside of window
- Dimensions: 80(W) x 40(H)mm

OUTSIDE SURVEILLANCE

- **WARNING STICKER** · Silver colour
- Sticks to outside of window
- Dimensions: 80(W) x 40(H)mm

LARGE OUTSIDE SURVEILLANCE **WARNING STICKER**

- · Black lettering on white background
- Sticks to outside of window
- Dimensions: 120(W) x 50(H)mm





7	Туре	Cat.	Qty 1+	Qty 2+	Qty 4+
	Small Inside	LA-5106	\$2.95	\$2.60	\$2.30
	Small Outside	LA-5107	\$2.95	\$2.60	\$2.30
	Large Outside	LA-5108	\$3.95	\$3.45	\$3.15

ALARM SYSTEM PIRS

Dual Element PIR Motion Detector

This advanced design incorporates Motion Signal Discretion (MSD) processing to distinguish between motion and nonmotion signals as well as pulse width analysis to ensure fast detection. Pulse counting technology is utilised to virtually eliminate false detections and provide trouble free operation.

- 100° angle
- Intelligent Pulse Count
- Coverage of up to 15mSimple installation
- NC contacts
- Tamper switch
- Walk test LED



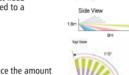


7	Cat.	Qty 1+	Qty 4+	Qty 8+
	LA-5036	\$29.95	\$26.90	\$23.70

CURTAIN PIR LENS - SUITS LA-5036 / LA-5038 Uses a narrow band making it ideal for indoor perimeter protection. Cat. I A-5033

LONG RANGE PIR LENS -SUITS LA-5036 / LA-5038

Increases the detection range of the PIR. Great for hallways and areas that need long distance sensing, as apposed to a broad angle of detection. Cat. LA-5034



PET TOLERANT PIR LENS -SUITS LA-5036 & LA-5038

Pet Tolerant PIR Lens helps reduce the amount of false triggers caused by roaming pets. Cat. LA-5037

7	Lens Type	Cat.	Qty 1+	Qty 4+	Qty8+
	Curtain PIR Lens	LA-5033	\$5.95	\$5.25	\$4.75
	Long Range PIR Lens	LA-5034	\$5.95	\$5.25	\$4.75
	Pet Tolerant PIR Lens	LA-5037	\$5.95	\$5.25	\$4.75

Dual and Quad Element PIR Detectors

Reliable and effective dual and quad element PIR detectors for home or office security applications. Both units are compact, attractive and easy to install with the features to match. Each has a built-in automatic temperature compensation to help eliminate false triggers in certain environments. 110 degree convex honey comb hemispherical infrared lenses are used and each unit has an extremely low current draw at 8mA. Both feature a swivel bracket for quick position adjustment. This quad unit offers higher levels of detection than the dual element model.

- · Detection type: Dual element low noise pyroelectric sensor
- · LED indicator: Walk test enabled by internal link

 Tamper switch 	
Specifications	
Operating voltage	9-15VDC
Current draw	8mA nominal at 12VDC
Range	12m max
Field of view	110 degrees max
Mounting height	1.5m-2.4m
Alarm output	NC, when cover on, 28VDC 0.1A
Warm up period	90 seconds
Pulse count	1 2 and 4 nulses selectable

Alaiiii output	INC, WHEN COVER ON, ZOVIC U. IA	4		
Warm up period	90 seconds			
Pulse count	1, 2 and 4 pulses selectable			
Dimensions	104(H) x 66(W) x 47(D)mm		100	
7	Cat.	Qty 1	+ Qty 4+	Qty 8+
Dual	LA-5044	\$29.9	5 \$26.90	\$23.70
Ouad	LA-5046	\$39.9	5 \$35.90	\$31.90

Recessed 240VAC 360° PIR Presence Detector

A Passive infra-red presence sensor switch for lighting energy saving applications. This 360 degree PIR has a 5 metre coverage which is recessed ceiling mounted and has a 75mm diameter. It has adjustable time delay and light level control function. For indoor use only.

3	•
Specifications	
Output Load	Max 1000W 5A Resistive/500W Inductive
On time duration	min 10 secs to max 16 mins
Dimensions	62mm cutout, 75mm overall, 60mm depth
Voltage	240VAC 50Hz
7	Cat

imensions	60mm depth	J 57 C. G.I.,	410		TEREN .
oltage	240VAC 50Hz				WARRANTU
7		Cat.	Qty 1+	Qty 4+	Qty 8+
		LA-5049	\$39.95	\$35.90	\$31.90

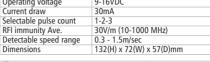
Freecall order hotline: 1800 022 888

Dual InfraRed & Microwave Motion Detector

This dual technology sensor provides the highest detection reliability by combining both IR and microwave motion detectors in one compact and attractive unit. The sensor will only signal an alarm when both detectors provide simultaneous intrusion signals. This provides inherent detection reliability and all but eliminates false triggering.

- 100° angle
- Excellent "Look Down" detection
- Intelli
- Co • Sin
- NC

 Coverage of up to 15m Simple installation NC contacts 		✓ home securit
Specifications		
Operating voltage	9-16VDC	



7	Cat.	Qty 1+	Qty 4+	Qty 8+
	LA-5039	\$69.95	\$62.95	\$55.95

Outdoor IP65 Rated Tri-tech Microwave PIR Sensor

Most PIRs can be triggered by pets, birds or other nonthreatening movement, so are generally not suitable for outdoor use. The dual lenses, use of two synchronised PIR sensors and microwave technologies, plus the movement detection algorithm built in reduces these false alarms and this together with the IP65 rating makes this sensor suitable for outdoor domestic or commercial security applications. It also has NO and NC alarm outputs, tamper switch and LED alarm trigger indicator.

- Contact rating 30V 2A
- All-in-one motion sensor
- 40kg pet immunity
- Automatic background analysis
- · Selectable PIR and microwave sensitivity

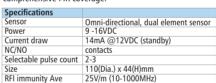
Swivel mounting bracket available Cat LA-5043

7	Cat.	Qty 1+	Qty 4+	Qty 8+
PIR	LA-5042	\$149.00	\$133.95	\$118.95
Swivel Mounting Bracket	LA-5043	\$19.95	\$17.70	\$15.70

home securit

360° Pulse Count PIR

This motion detector employs an omni-directional infrared sensor and a reliable electronic circuit to provide reliable 360° intruder detection. It can cover up to 15m and is ideal to expand an existing alarm system or for a new system that requires comprehensive PIR coverage.





LIEFE



1	Cat.	Qty 1+	Qty 4+	Qty 8+
	LA-5041	\$149.00	\$133.95	\$118.95

ALARM STROBES & SIRENS

Blue 12V Siren/Strobe

A combined siren and LED strobe for alarm system consu

Specifications	
Output	120dB
Operating voltage	12VDC
Dimensions	120(L) x 72(W) x 42(H)mm

mption.	ous output with low powe	
fications		
ıt	120dB	
ting voltage	12VDC	The second second
nsions	120(L) x 72(W) x 42(H)mm	
	C-4	06.4.1

12V Outdoor Siren / Bellbox

Bellbox and siren for outdoor use. Important visual deterrent factor in any security system. 12V operation, so will happily work with a range of alarm systems. Anti-tamper switch included

Specifications	
Output	112dB output @ 1m
Operating voltage	12VDC
Current consumption	300mA
Dimensions	202(W) x 112(H) x 65(D)mm

Difficusions	202(W) X 112(H) X 65(D)IIIIII		
7	Cat.	Qty 1+	Qty 4+
	LA-5301	\$29.95	\$26.90





Qty 4+ \$22.35

Otv 8+

\$19.70



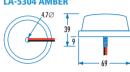
ALARM STROBES & SIRENS (CONTINUED)

Mini Size - Xenon

These mini strobes are weatherproof and rustproof. They utilise a long-life xenon tube and are very bright for their size. Surface mount, single cable entry hole.

- Voltage: 12VDC
- Current drain: 180mA
 Strobe rate: 90 flashes / minute
- Dimensions: 69(dia) x 30(H)mm

Three colours available: LA-5302 BLUE **LA-5303 RED** LA-5304 AMBER



7		Cat.	Qty 1+	Qty 4+	Qty 8+
	Blue	LA-5302	\$24.95	\$22.35	\$19.70
	Red	LA-5303	\$24.95	\$22.35	\$19.70
	Amher	Ι Δ-5304	\$24.95	\$22.35	\$19.70

Mini Size - LED

LED strobes for security alarm or emergency use. Low current consumption units are fully sealed and waterproof; suitable for outdoor alarm applications. Mounts with 2 x 5mm bolts.

Blue

Red

12VDC operation.Measures: 70(Dia) x 45(H)mm

LA-5326

I A-5327

Amber LA-5328

Large Size (Xenon)

Bigger and brighter, as well as weatherproof and rustproof. Voltage is 6-12VDC, current drain is 220mA,

flashrate is 75 per minute at 12V.

· Flash rate slower at lower

voltage.
• Lens colour blue • 100(Dia) x 88(H) mm \$19.95

\$19.95

\$19.95







(
v 4+	Otv 8+





Qty 4+

\$17.70

\$17.70

\$17.70

Qty 4+

Qty 8+

Piezo Siren

7 Cat.

Black in colour, supplied with mounting bracket and connecting cable.

Small 'Tweetie Pie' Siren

This incredible little

a 116dB wail. It sounds like a very

piezo screamer emits

loud canary. The sound at close range

is almost unbearable!

noise alarm application

Current 200mA max

less bracket

Cat.

Pie' Siren

too much of a

LA-5255

Large 'Tweetie

This piezo screamer is the original Tweetie Pie's big brother. It is ideal if space is not

problem, but it's still far smaller than all

our other sirens. This

screamer is louder

Colour is black

LA-5254

incl mounting bracket.

Operating voltage: 12VDC.

than the smaller

Measures 57(L) x 33(H) mm

Qty 1+

\$19.95

Tweetie Pie, it's 119dB and draws only 250mA.

Qty 1+ \$34.95

Measures 90(L) x 62(W) x 70(H)mm

Qty 4+

\$17.70

Qty8+

Qty 4+ Qty 8+

\$31.45

Otv 4+

\$31.45

Otv 8+

Operating voltage: 12VDC

Ideal for any compact high



 Length 80mm, 80mm diameter. Operating voltage: 12VDC

Resonant Freq: 3kHz

· Sound Output: 120dB Current Drain: 300mA

LA-5258

Cat

Plastic Siren Cover

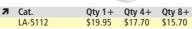
RUSTPROOF & UV STABILISED - Remains attractive in any environment. Will accept 5" siren, has 3 holes drilled for mounting strobe, and bracket for mounting a tamper switch, which is supplied.

\$34.95

- 5 year warranty for UV protection
 Measures approx 175 x 155mm at back
- 125 x 125mm at front
- Depth 145mm
- White in colour
- · Includes tamper switch







Indoor Piezo Siren

This unit is very popular for indoor use with house alarms. It is dustproof & waterproof.

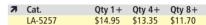
- Voltage range: 7.5 to 15VCurrent (approx): 200mA @12V
- Output: 100-105dB @ 1m Measures: 85(Base) x 42(H)mm

Qty 1+ Qty 4+ \$13.95 \$12.35 LA-5256 \$10.95

Flush Mount Piezo Siren

Modern day replacement for the traditional top hat screamer. Mounts flush in the ceiling making it less noticeable

- White in colour Voltage: 6-15V DC
 Current: 150mA
- Output: 108dB @ 1m D47 x H52mm
- Mounts in hole dia of: 47 62mm



5" Horn Speaker

Fully weatherproof. Unique voice coil construction ensures high dependability on full drive.

- Suitable for PA intercom, security systems, etc.
- 10 watt 8 ohm.



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	Δς_3180	\$16.95	\$14.95	\$13.35

5" x 8" Horn Speaker

This attractive unit in high impact white plastic features stainless steel hinge bolts. The special bracket enables maximum flexibility in mounting. Ideal for any outdoor application including marine.

- · Rated at 30 watts power handling
- 8 ohm



Qty 4+ Qty 10+ Cat. Qty 1+ AS-3190 \$29.95 \$26.90 \$23.70

Piezo 4 Tone Siren with Controller

A very loud 125dB siren, it has four different tones police, ambulance, fire engine or truck air horn. Connects to a 12VDC power source and select a tone with the controller. Sturdy moulded plastic construction with metal mounting bracket.

- 125dB 12VDC • Dimensions: 150(L) x
- 130(Dia)mm



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Cat.

LA-5300

AIRCRAFT OWNERS/OPERATORS

If you operate mobile equipment on the aircraft side of an airport you must now fit an amber flashing light on such equipment. Save yourself a fine & wire an amber unit to your vehicle. All units are 12V powered. Simply wire across ignition circuit so that strobe automatically comes on when vehicle is started.

INTERCOMS

2 Station Wired Intercom

Either station can signal the other even when the system is off. It can be used as a room/baby monitoring system.

- Solid state circuit
- Adjustable volume
- Call facility even when unit is off
- · Hands-free communication on sub-
- Operates on 9V battery or 240V plugpack
- Supplied with 20m of connecting cable and staples.

Domestic use only. Warranty does not apply if product is used industrially.



Intercoms - Video Doorphones



AI-5500

2 Channels

- Power points used must be on same

phase, ideally the same circuit Cat.

2 Station Wireless FM Intercom

Plugs into a 240V power point and will send to

another room, upstairs etc. Both units need to be



\$59.95

Qty 4+

\$67.50

\$74 95





Wireless Intercom Doorphone - 2.4GHz

A compact wireless intercom/doorphone with 2.4GHz digital transmission for crystal clear and interference free range up to 100m range. Never miss anyone at your door with the portable receiver as it incorporates rechargeable batteries and can be taken around the house or even the garden. Comes with 240V mains charger.

- Traditional ding dong sound
 Powered by 4 x AA batteries for outdoor unit (not included)
- Powered by 3 x AAA rechargeable batteries for indoor unit (included)
- Weatherproof outdoor unit Operating range up to 100 metres Two way interference free intercom
- Name plate will glow in dark
 Portable indoor unit
- Press to talk with the visitors

Qty 1+

\$79.95

\$22.35

- Outdoor unit: 135(L) x 95(W) x 30(H)mm
 Indoor unit: 115(L) x 67(W) x 35(H)mm







Wireless Colour Video Doorphone - 2.4GHz DIGITAL

A compact wireless video doorphone that's big on features. Incorporating digital A compact wireless video doorphone that's big on features. Incorporating digital encryption and code-hopping 2.4GHz wireless transmission, signals are clear and interference-free up to 100m range. The receiver unit features a high definition 3.5" TFT LCD and can store up to 200 images internally. It also has a built in rechargeable battery so you can take the monitor anywhere around the house. The camera unit is very easy to install and equipped with a wide angle lens and IR illuminator. The door can be unlocked at a touch of a button and has hands-free call and talk function.

- HD 3.5" TFT LCD screen
- 2.4GHz wireless transmission
- 100m transmission range
- Clear night vision

ECURITY & SURVEILLANCI

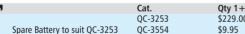
- Holds up to 200 pictures
- Mini USB interface is provided on indoor unit for PC connection
 Dimensions: 290(W) x 210(H) x 50(D)mm







	, , , , , ,	,	
7		Cat.	Qty 1+
		QC-3253	\$229.00
	Spara Rattery to suit OC-3253	OC-3554	¢0 05





Specifications



Wireless 7" Colour Video Doorphone with Recording - 2.4GHz DIGITAL

Add a video door phone to your home or office without the need to run wires. Power the weatherproof outdoor unit from the included power supply or from 6 x AA batteries (not included), which will last up to 6-months of domestic use. View and speak to visitors from the 7" colour monitor and unlock the door at the press of a button (door lock required). Another unique feature is it's ability to record any visitors you had while you were out, saving the vision to an SD card (available separately). Supplied with power supplies for outdoor and indoor units, DC power and door lock cables and mounting hardware.







Freecall order hotline: 1800 022 888

Oty 1+

- Weatherproof (IP-55) camera with rain shield
- 2.4GHz for transmission up to 100m
- · Digital encryption with code-hopping One-touch door unlock button
- IR LEDs for night time illumination up to 0.8m

Qty 4+

\$279.00

· AV output to a TV or other monitor

Qty 2+

\$315.00

Specifications	
Resolution	640 x 480 (VGA)
Camera sensor	1/4" CMOS
Camera viewing angle	85° Horizontal 65° Vertical
SD card video capacity	
(not included)	
	1GB: 110 mins / 2GB: 250 mins
	8GB: 1070 mins / 16GB: 2170 mins
	32GB: 4300 mins
Dimensions	
Door unit	169(H) x 85(W) x 36(D)mm
Answering unit	221(W) x 143(H) x 35(D)mm

		~- <i>)</i> · ·
	QC-3621	\$349.00



Video Doorphones

VIDEO DOORPHONES - WIRED

Slimline 3.8" Colour LCD Video Doorphone

Don't settle for Black and White! With this cost effective full colour LCD video Door phone, you can see you guest in full living colour. Integrates a 3.8" LCD screen and an infrared cmos camera, you are able to see and communicate with your visitors day and night. With

- 3.8" TFT LCD screen
- Slimline design
- Infrared LEDs built-in to the camera for use at night
- Mains power supply included
 Monitor dimensions: 125(L) x 215(H) x 23(D)mm
- Outdoor camera dimensions: 100(L) x 134(H) x 38(D)mm

the added feature of electronic door locking control, you have the option of allowing visitors in and keep out unwanted ones out. The slimline wall mounted design, it will not look out of place in your

\$118.95









Slimline 7" Colour LCD Video Doorphone

This easy to use video door phone is great for screening visitors without even having to come to your door. Supplied with a high-resolution infrared CCD camera, high quality images are displayed through the 7" full colour LCD

OC-3604

display. Integrates an intercom function which allows you bi-directional

interference free conversation. For added security you can lock or unlock your door with one touch and even use it as an alarm system. Easy to install, the super slim design makes it great for any modern home and you will have it up and running in no time.

- 7" TFT LCD screen
- CCD Camera
- · Infrared for use at night
- 19mm super slim touch screen

Specifications	
Power supply	15VDC
Resolution	420 TV lines
Monitor dimensions	235(L) x 100(H) x 24(D)mm
Outdoor camera dimensions	100(L) x 134(H) x 45(D)mm





		-		Control of the Contro
7	Cat.	Qty 1+	Qty 2+	Qty 4+
	OC-3608	\$199.00	\$178.95	\$158.95

8" Colour LCD Video Doorphone with Image Capture

Slim and modern, this video door phone has it all. It au allov

vou

Specifications

 8.4 inch HD TFT-LCD colour monitor Automatic shutdown time 60 seconds

and modern, this video door phone has it all. utomatically captures an image or video clip of ors when the doorbell button is pressed, wing you to positively identify visitors before let them in and give them the third degree	over the intercom if necessary. You can also do the usual unlock or simply monitor what's going on outside from the indoor monitor. The ideal way to keep an eye on welcome and possibly not-so-welcome visitors.
leathernroof camera	



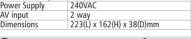


\$279.00





Power consumption	<8W
Power Supply	240VAC
AV input	2 way
Dimensions	223(L) x 162(H) x 38(D)mm



•	QC-3618	\$349.00	\$315.00
8" Colour LCD Doorphone	System with 4-	Channel Reco	rdina

This is the next generation in video door phone entry systems. The 8-inch high resolution LCD screen connects up to two intercom/camera unit like a traditional door phone. This powerful video door phone unit also has a built in Digital Video Recorder (DVR) with a four camera input. You can connect up to 4 additional security cameras (QC3629) to the screen, giving you four-channel security. The monitor can then display

a multi-way split screen view, or auto-switch between channels. With 500GB hard drive included for storage, you can keep a record of whois coming and going. Supports manual, motion detection, visitor call and loop coverage recording functions. The unit also features remote access from the internet, so you can keep an eye on your surveillance system from anywhere in the world!

- 8" TFT LCD colour screen
- · Quad split screen or full screen display
- Total of 6 video inputs
 Hard drive capacity: 2.5"/ 500GB Hard drive
 Remote access over Ethernet or internet
- Set up like a desktop computer or mount to the wall Mains power supply included
- Monitor dimensions: 210(H) x 250(W) x 35(D)mm

SPARE/ADDITIONAL CAMERA TO SUIT QC-3628
This camera will expand the functionality of your QC-3628 Video Door Phone / DVR system to a multi-channel surveillance system. The camera is easily mounted and positioned with the ball-head bracket, and connects easily into the monitor unit.

• Camera dimensions: 110(H) x 115(W) x 24(D)mm (excluding shade) Cat. OC-3629

Cat. QC-3023					ERRASHTU ERRASHTU	
7	l	Cat.	Qty 1+	Qty 2+	Qty 4+	
	Doorphone System	QC-3628	\$549.00	\$495.00	\$439.00	
	Additional Camera	QC-3629	\$79.00	\$70.95	\$62.95	



2.5" LCD Electronic Door Peep Hole Viewer

Eliminate the small and distorted fish eye view that a traditional door peep hole provides with our electronic door peep hole viewer. No more squinting, hunching over peering through a small hole. With its big 2.5" LCD screen and a built in distortion compensation feature, you are able to see the person clearly on the other side of the door by a simple press of a button.



Cat.

OC-3267

Qty 1+

\$129.00

DOORBELLS

SURVEILLANCE

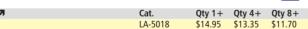
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Wireless Doorbell

Install a doorbell without the mess of wires and drilling. This simple home wireless doorbell has 32 melodies to choose from and is completely wireless so all you need to do is secure the transmitter next to your door and place the receiver unit where it can be heard.

It has an operating range of 50 metres in open air and is suitable for homes and office buildings

- Easy to install at an affordable price.
- · Receiver requires 3 x AAA (not included)



240VAC Plug-in Wireless Doorbell

Simple plug and play in design. This compact sized doorbell receiver plugs into a power point and is not much bigger than a slim line power supply, so it fits on your powerboard or double wall socket without taking up too much space.
Once plugged in, the battery powered wireless doorbell button can transmit up to 100 metres chiming out one of the 32 selectable melodies.

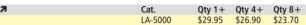
· Suitable for rental properties, apartments and small offices.



Wireless Doorbell with V8, F1, Bike or Ding-Dong Sound

If you love cars you'll love this fantastic wireless doorbell. Choose between a thumping V8, a Formula-1 racer, or motor bike and get your heart pumping every time the doorbell rings. If that gets too exciting you can switch to a sedate ding-dong while you recover. There have been other doorbells like this, but they don't sound anywhere near as good as this one

- 30m transmission range
 Requires 3 x AAA batteries
- Mains adaptor included
- · Mounting hardware included



Wireless Doorbell Alarm with Clock & Temperature

A multi-function wireless doorbell suitable for the elderly or the hearing impaired. Utilises an LED light alerting system; it incorporates a flashing blue led to indicate doorbell activation and red led for the remote alarm trigger. It is also accompanied with 36 user selectable melodies for the doorbell function and 9 alarm tone settings. The portable LCD chimer is powered by 3 x AAA batteries and has a range of up to 80 metres. Time, date and indoor temperature are shown on the LCD. Also supports other functions such as a count down timer or an alarm clock.

• Battery life up to 12 months (based on 20 operations per day)

· Transmission range 80 metres line of sight



- 36 door bell melodies
- 9 emergency tones
- 8 alarm clock musical sounds

- Includes 1 x CR2032 battery for each transmitter Includes 2 x AG13 batteries for
- LCD calendar back up Requires 3 x AAA batteries for
- LCD chimer



- Doorbell transmitter:
- Alarm Transmitter: · LCD Chimer (receiver):

45(W) x 16(H) x 90(D)mm 45(W) x 16(H) x 85(D)mm

115(W) x 25(H) x 175(D)mm

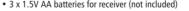
Cat. Qty 4+ Qty 8+ LA-5022 \$31.45 \$34.95

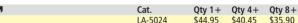
Wireless MP3 Doorbell

A wireless doorbell that plays your very own favourite MP3 song or message, or one of 32 pre-loaded polyphonic sounds. To load your MP3 file simply connect the main receiver unit to your PC and use the supplied software to trim, save and upload the file. The sleek

elegant design won't compromise your room's decor either. Supplied with USB cables, CD with MP3 trim software and user manuals.

- Readable tune format: MP3 file
- . Built-in sound: 32 polyphonic sounds
- Operating range: up to 50m
- Transmitter with waterproof:
- 1 x 12V A23 battery for transmitter (included)
- 3 x 1.5V AA batteries for receiver (not included)





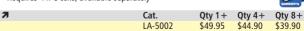
High Sound Level Wireless Doorbell with Strobe for the Hearing Impaired

When this doorbell rings, the sound is accompanied by several bright flashes from the receiver's built in strobe light, which makes it much easier for a hearing impaired person to know that someone is at the door. The sounder can be taken from room to room, or even used outdoors and will work up to 30 metres from the transmitter button. The melody can be set to one of seven

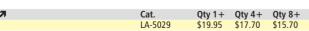
different sounds and has two volume levels - medium and loud The unit is supplied with a neck lanyard and mounting hardware for the transmitter button.



- 210mm long.
 Requires 4 x C cells, available separately









Freecall order hotline: 1800 022 888













Door & Driveway Beams

ENTRY ANNOUNCERS

Solar Wireless PIR Announcers

Monitor areas wirelessly with this Solar Wireless PIR motion detector. The PIR sensor reliably detects movement and transmits to the indoor announcer. It comes with a solar panel which mounts on the roof and connects to the sensor to ensure very long battery life. Great for installation in areas where it is not convenient to constantly replace batteries. Use as a driveway entry alert, garage or shed alarm or door entry and backyard announcer. Easy to install and mounting hardware is included



- Control panel requires 4 x D batteries
- PIR detector requires 2 x AAA batteries
- Dimensions:Unit: 122(W) x 143(H) x 52(D)mm
- Wireless PIR: 75(W) x 120H) x 60(D)mm









7	Cat.	Qty 1+	Qty 2+	Qty 4+	
Battery Powered	LA-5172	\$59.95	\$53.95	\$47.90	
Battery & Solar Powered	LA-5174	\$79.95	\$71.95	\$63.95	
Doorbell to suit LA-5172/74	LA-5173	\$14.95	\$13.35	\$11.70	

DOOR & DRIVEWAY BEAMS

Solar Powered Wireless IR Annunciator Kit

With a wireless transmission range of up to 100m, this annunciator kit is a perfect, reliable solution for monitoring traffic in and out of driveways to shops, large commercial and rural properties. Attach the wireless IR detector at the entrance and be alerted of customers or guests as they enter and leave your premise. Installation is easy, the detector runs on 4 x AAA rechargeable batteries and is topped by the solar panel charger included. The wireless receiver can be wall mounted, placed over the counter, desk or wall mounted with no messy wiring connections in between.

Qty 1+

Wireless IR detector	
Includes	4 x AAA rechargeable batteries
Transmission Range	up to 100m
Transmission frequency	433.92MHz
IR detection range	2 - 6m
Dimensions	71(L) x 64(W) x 43(D) mm
Annunciator	
Туре	microprocessor based control unit
Transmission frequency	433.92MHz
Requires	4 x 1.5V D size alkaline battery
Operating temperature	0°C - 40°C
Dimensions	143(L) x 110(W) x 50(D) mm
Solar Panel (without bracket)	
Dimensions	173(L) x 123(W) x 14(D)mm



Qty 2+





and the same	

Commercial C	Grade Do	oorway Beam
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A compact entry warning system is designed for use in shops, restaurants, doctors and dentist surgeries etc. to alert you to the entry of customers and visitors. The system consists of a send/receive unit which transmits an IR beam across the doorway onto a prismatic reflector mounted on the opposite side. The beam is reflected back to the receiver to complete the circuit.

Cat.

LA-5176

When a person walks through the beam, the circuit is interrupted and this causes the alarm to sound an audible warning. The warning buzzer can be mounted in any suitable location. Mains plugpack and mounting hardware included.



- Adjustable alarm time and volume
- Transmitter/Receiver size 70(H) x 60(W) x 30(D)mm
- · Reflector size: 65 x 53mm

7	Cat.	Qty 1+	Qty 4+	Qty 8+
	LA-5193	\$79.00	\$70.95	\$62.95



DID YOU KNOW...

Karlheinz Brandenburg (1954 -) 1989, his research formed the basis of MPEG-1 Layer 3 (MP3), MPEG-2 Advanced Audio Coding (AAC) and most other modern audio compression schemes

Counter to suit Doorway Beam LA-5193

Attach to our LA-5193 Door Beam units to easily measure the door entry count in your shop, factory or office. The 20m lead carries both the signal and power, allowing you to mount the counter in a convenient location away from the door entry. This product is a must have for the serious retailer to easily measure the store traffic to sales conversions in their store.

- Counts up to 9999

Qty 4+

Includes '+','-' and 'Reset' buttons
 Dimensions: 60(W) x 70(H) x 23mm(D)

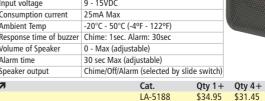
7	Cat.	Qty 1+	Qty 4+	Qty 8+
	LA-5197	\$34.95	\$31.45	\$27.90

Door Extension Buzzer to suit LA-5193

hardware and a 10m lead and an adjustment screwdriver.

This neat and compact buzzer can be mounted anywhere and is recommended as an addition to our Door Security Beam with Reflector (LA-5193) as an extension alarm. The volume of the buzzer is adjustable and the sound output can be selected by a slide switch to Alarm, Off or Chime. The sounding time can also be adjusted from 3 to 30 seconds. Supplied with mounting

Specifications	
Input voltage	9 - 15VDC
Consumption current	25mA Max
Ambient Temp	-20°C - 50°C (-4°F - 122°F)
Response time of buzzer	Chime: 1sec. Alarm: 30sec
Volume of Speaker	0 - Max (adjustable)
Alarm time	30 sec Max (adjustable)
Speaker output	Chime/Off/Alarm (selected by slide switch)
_	





Door & Driveway Beams & Control Switches

DOOR & DRIVEWAY BEAMS (CONTINUED)

Commercial Grade Doorway Beam



This doorway beam is perfect for use across gateways or garage doors; basically anywhere you need a longer range than our LA-5193. Importantly, this unit has been designed to be used in genuine commercial environments such as warehouses and parking lots where a more robust unit is required

- The units are housed in IP66 rated enclosures allowing use in damp or dusty environments. Cable glands are also included.
- Alarm output is via a relay with normally closed and normally open options.
- Built in protection against noise, voltage surges, and vibration.
- Alarm LED (Receiver): Red LED when beam is not aligned or is broken
- Sensing Angle Adjustment: Horizontal and Vertical +/- 5
- Tamper switch

The LA-5196 is supplied only with the transmitter and Receiver units and two cable glands. You will need a Receiver units and two capie gianos. rou will need a power supply (eg MP-3174) but please note that a long power cable run may require a 24VDC supply to overcome voltage drops on the DC Cable. Also, you will need a buzzer or siren if you want an audible alarm (eg AB-3462), and two core flex such as WB-1702 for connecting the relay output.

Specifications	
Max range:	30m
Voltage:	10 to 24V DC
Current Consumption: TX:	33.5mA Rx 27.5mA (max)
Detection Method:	Through beam
Contact capacity:	NO / NC 1A @ 120VAC



7	Cat.	Qty 1+	Qty 4+	Qty 8+
	LA-5196	\$89.95	\$80.95	\$71.95

Dual Beam Infrared Barrier

Protect your doors or windows with this dual beam infrared detector. It's housed in a strong aluminium case and is suitable for outdoor use in protected environments. The detector will sound an internal buzzer and energise a relay when the beam is broken or tampering is detected. Mounting hardware included





Non-Contact Infrared Door Exit Switch

This infrared sensor can replace the old push button switch on automatic exit doors so that they will open with just a wave of your hand. The sensor will trigger an internal relay when your open hand comes within 100mm of the panel. No actual contact is required so there can be no transfer of contagions from one person to the next. The sensor is mounted on a stainless steel plate and has indicator LEDs built in to signal that the switch has been

- 12VDC supply voltage 3A @ 30VDC contact rating
- 30mm sensor diameter
- 70 x 115mm plate dimensions





BIOMETRIC ACCESS SYSTEMS

Universal Fingerprint Access Controller

A complete bio access control solution that enables you to enrol up to 120 users. The fingerprint scanner reads in less than two seconds and provides different output options including Wiegand, NO/NC relay, alarm or door strike control. It has a robust cast housing and all operating parameters are stored in a flash memory so it won't be lost due to power failure.

CRAZU

- · All metal construction
- Weatherproof and tamperproof
- IR remote control
- · Flash memory storag
- Storage for up to 120 fingerprints Up to 4 supervisors
- Output 1: Wiegand 26-34







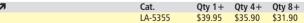


Self-Contained Security Keypad

This self-contained and economical keypad is designed for door-strike and security control applications. It has a single-relay output as well as a separate open collector transistor output intended for duress both with terminal blocks for easy connection. It has almost 100 million possible combinations for the user code(s) and the master code (4 - 8 digit code length), and a duress code for emergencies. The keypad employs an EEPROM memory so that the codes you have programmed will not be lost if the power fails. Presented in a tamperproof stainless- steel wall-plate and plastic backing box. It also features audible key beep and LED status indicators.

Specifications	
Voltage requirements	12VDC
Relay output capacity	3A. 24VDC
Dimensions	117(W) x 74(D) x 48(H)mm
	117(VV) X 74(D) X 40(H)IIIIII
Will interface with most alarms	

Dimensions	117(W) x 74(D) x 48(H)mm	
Will interface with most alarms			
7	Cat	Otv 1⊥	Otv



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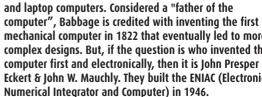
DID YOU KNOW...

Charles Babbage (1888 - 1946)

An English mathematician, philosopher, inventor and mechanical engineer, Babbage was the first person to introduce the idea of 'programmable machines'. He hardly imagined that his distaste for human errors would one day result in inventions such as desktop computers

Freecall order hotline: 1800 022 888

computer", Babbage is credited with inventing the first mechanical computer in 1822 that eventually led to more complex designs. But, if the question is who invented the computer first and electronically, then it is John Presper Eckert & John W. Mauchly. They built the ENIAC (Electronic



RADIO FREQUENCY ID DEVICES (RFID)

Digital Keypad with RFID Access Control

A single door multifunction standalone access controller or a Wiegand output keypad/card reader suitable for an area requiring stricter access control such as a laboratory, warehouse, bank, or prison. The unit is suitable for mounting indoor or outdoor in harsh environments. It's housed in a sturdy IP85 vandal proof zinc alloy electroplated case that can mounted to a wall with minimal drilling. Up to 2,000 users are supported in either a card, a 4 digit PIN, or a card + PIN option and the inbuilt card reader supports EM, 125KHz frequency cards. Red/Yellow/Green LEDs will indicate working status of the device. Protective features include anti-magnetic MOS output, output current lock, and short circuit protection.

- Waterproof
- 2000 users
- Backlit keypad
- LED indicator (Green/Yellow/Red)
- Wiegand 26 input for the connection of an external reader
 Adjustable door output time, alarm time and door open time
- Built in light dependent resistor for anti-tampering
- Built in buzzer

Specifications	4
Voltage	12VDC
Keypad	12 keys, 3 x 4 digits
Card Type	EM 125KHz
Card Reading	Distance: 3-6cm
Active current	<60mA
Operating Temperature	-15-60 degrees Celsius
Adjustable Door Relay time	99 seconds
Adjustable Alarm Time	0-3 minutes
Weigand Interface	Wiegand 26 bit
Wiring Connection	Electric Lock, Exit Button, DORL, External Alarm
Dimensions	135(H) x 58(W) x 26(D)mm

71	Cat.	Qty 1+	Qty 4+	Qty 8+
	LA-5353	\$99.00	\$88.95	\$78.95

Low Cost RFID Access Control Keypad

With a card capacity of up to 500 RFID cards, this low cost RFID unit is designed to control door strikes in home or business access control installations. It allows 4 entry methods: password, proximity card, password + proximity card and egress push button entry. Security zone detection which can be armed or disarmed and 3 output relays for door strike control, security system triggering and duress alarm.

•	, , ,
Specifications	
Power supply	12VDC
Power consumption	20mA (Standby), 125mA (Reading)
Read range	140mm(Max)
Frequency	125kHz (EM4001)
Operating temperature	-15°C to 55°C
Operating humidity	90%RH (max)
Housing material	ABS



Cat. ZZ-8950 Cat. ZZ-8952 Cat. ZZ-8953







EM400X RFID TAGS

RFID Key Fob

LANYARD TYPE

• Dimensions: 31(W) x 40(L) x 5(H)mm Cat. ZZ-8950

Clear 21mm Diameter RFID Tag

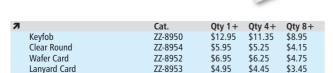
• Dimensions: 21mm diameter, less than 1mm thick

RFID Wafer Card

It is around the same size as a standard credit card. Cat. ZZ-8952

RFID Tag - Lanyard type

Hangs on a lanyard or belt clip. Similar size to a credit card. Cat. ZZ-8953



REMOTE CONTROL SWITCHES

4 Channel Remote Control Relay with 2 Key Fobs

Control up to 4 different devices with a single controller and key fob remote. The receiver unit has 4 channels, each of which can be independently configured to momentary or latching mode via DIP switch. Countless access control applications - doors, alarms, entry points, arming or disarming security systems all in one unit. Includes 2 key fobs



Specifications	
Power input	10 - 15VDC
Current draw	350mA max
Standby current	<10mA
Transmission distance	30m typical (300m+ max line of sight)
Transmission frequency	433.92MHz
Transmitter features	SAW locked, rolling-code,
iidiisiiiittei leatures	water-resistant.
Learning capacity	250 remotes per module.
Outputs	4 x NO/NC relay contacts individually selectable as momentary or latched.
Relay contacts	5A max at 14VDC
Receiver size	90(L) x 60(W) x 35(H)mm

Spare remotes LR-8829 and LR-8819 sold separately



Hardwired Transmitter LR-8819



4	7	Cat.	Qty 1+	Qty 2+	Qty 4+
	4 Channel Remote	LR-8824	\$99.00	\$88.95	\$78.95
	Hardwired Transmitter	LR-8819	\$39.95	\$35.90	\$31.90
	Spare Remote	LR-8829	\$24.95	\$22.35	\$19.70

One Channel Hand Controller/Transmitter

For over 15 years now, one brand of remote control has dominated the Australian & New Zealand markets for remote controls for garage doors, motorised gates, lighting, alarms etc. This unit, called the FMT-301, is a 27MHz crystal controlled NBFM (Narrow band frequency modulated) device. It is coded with a 12-way DIP switch. There are over a million in service in Australasia. They are very reliable but they do wear out, drown, go walkabout or simply get lost. We now stock the most popular single channel unit. This will save ordering one through the garage door people who charge a fortune for replacements. This is the latest version of the most common operating transmitter in use in Australia/New Zealand today. It operates (always has) on 27.145MHz & requires a 216-type 9V cell. An alkaline battery is recommended but is not included. The controller is custom coded via a DIP-switch which is accessible from the

- Weight: 72g excluding battery
- Dimensions: 96(H) x 55(W) x 20(D)mm



Suits garage doors, motorised gates etc.

7	Cat.	Qty 1+	Qty 4+	Qty8+
	LR-8827	\$49.95	\$44.90	\$39.90

Single Channel Keyfob Remote

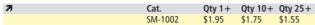
Multi-purpose remote control keyfob for garage doors, lights, automatic gates etc. It operates in the 27MHz band on an FM signal. The built-in microcontroller uses the latest technology allowing for easy setup and installation while providing maximum security and reliability.

- Battery status LED
- Up to 200m range



7	Cat.	Qty 1+	Qty 4+	Qty 8+
	LR-8847	\$49.95	\$44.90	\$39.90

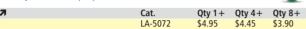
*Normally open, but closed when near magnet (see note at bottom of page)



NC Reed Switch & Magnet

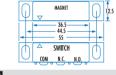
These are used to secure an alarm circuit on a door or window. Sold as a pair, one has a magnet inside, the other a reed switch. They have powerful magnets, with self adhesive or screw mount. Screw terminating Size same as LA-5070. Contacts open when magnets are apart and closed when together Burglar Alarm Industry Standard



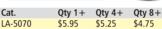


NO & NC Reed Switch & Magnet

You have both types of contacts on the one unit. Normally Open (NO) and Normally Closed (NC) per pair. Temperature: -40°C to 80°C







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Reed Switches & Magnetic Locks



Just drill a recess in your door or window and the magnet flush mounts to be "invisible". The reed switch segment is similarly mounted into the door frame or window frame & wired into your system. Available in two versions to suit timber or metal frames with both versions normally closed contact.

TAPERED VERSION TO SUIT TIMBER FRAMES

• Dimensions: 31(I) x 9(Dia)mm

Surface Diameter: 19mm



SURVEILLAN

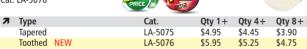
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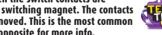
TOOTHED VERSION TO SUIT METAL FRAMES

Dimensions: 19(L) x 19(Dia)mm
Surface Diameter: 24mm

Cat. LA-5076



NORMALLY CLOSED. This is when the switch contacts are touching in the presence of a switching magnet. The contacts OPEN when the magnet is removed. This is the most common system in alarm circuits. See opposite for more info.



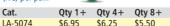
NC Miniature Reed Switch & Magnet

Absolutely tiny, these encapsulated reed/magnet switches with leads are ideal for home and car security. Their size should make them extremely easy to conceal so that potential thieves are less likely to disable them. Made from moulded plastic.

- White in colour. Supplied with 300mm lead
 Dimensions: 33(L) x 8(W) x 8.5(D)mm
 Width including mounting tab: 15mm
 Hole spacing: 18mm
 Norm

- Wire lead length: 300mm





LA-5074 \$6.95 \$6.25 \$5.50

DOOR STRIKES

Narrow Electric Door Strikes

Upgrade your conventional door locks to keyless entry electronic access. These new electric door strikes are suitable for narrower doors, and are now available in either fail-secure or fail-safe models. A fail secure door strike will keep a door locked shut in the event of a power failure. Conversely, fail safe door strikes keep doors unlocked in the event of a power failure. So choosing between the two depends on whether your priority is internal security or exit safety in case of emergency. These electric door strikes complement our range of RFID controls for card or fingerprint access, or they can also be paired with one of our intercoms or video doorphones to create a convenient remote door access system.



• Plate size: 160(L) x 25(W) x 28(H)mm

FAIL-SECURE TYPE Cat. LA-5077

Power: 12VDC, 450mA

Fail Safe Type

FAIL-SAFE TYPE Cat. LA-5079

Power: 12VDC, 200mA

Fail Secure Type LA-5077 \$29.95 \$26.90 \$23.70 LA-5079

Standard Door Strike

Unlock your door with the push of a button - from the other side of the house or office! Designed for use with cylindrical lock- sets (commonly used on wooden and aluminium doors), it converts a conventional lock- set to an electronic access- controlled locking system. Benefits include higher security, and user convenience without needing to use a key.

- Dimensions: 150(L) x 39.5 (W) x 28(H)mm
- Zinc alloy face plate

FAIL-SECURE TYPE 12VDC 450mA

(on striking) Cat LA-5078

FAIL-SAFE TYPE 12VDC 200mA (in locked state)

Cat LA-5081









\$29.95

\$26.90



LA-5060

LA-5063

\$23.70

7		Cat.	Qty 1+	Qty 4+	Qty 8+
	Fail Secure Type	LA-5078	\$49.95	\$44.90	\$39.90
	Fail Safe Type	LA-5081	\$39.95	\$35.90	\$31.90

MAGNETIC LOCKS - DOOR

Electromagnetic Door Locks

Compatible with any access control system, magnetic door locks meet the most rigorous building and fire safety codes. With no moving parts to bind or wear out, they provide positive, instantaneous release, whether from a signal from a fire command console, remote control or access control. Depending on application, you can install a lock with a holding force of 180kg or 280kg. They can be surface mounted or ZL and L brackets provide for installation flexibility in wood, metal or glass doors. Match them up with any access control device such as an RFID or biometric sensor. Both operate from 12VDC and are finished in satin anodised aluminium. Suitable for in-opening or out-opening doors, mounting hardware and drilling templates included.

180KG ELECTROMAGNETIC DOOR LOCK

- Operating voltage: 12VDCCurrent: 380mA
- Holding force: 180kg
 Dimensions: 170(L) x 41(W) x 21(H)mm





280KG ELECTROMAGNETIC DOOR LOCK

Operating voltage: 12VDC

Current: 500mA

Holding force: 280kg

Dimensions: 250(L) x 49(W) x 25(H)mm



ZL Bracket Cat LA-5064

L Bracket Cat LA-5065





7		Cat.	Qty 1+	Qty 4+	Qty 8+
	180kg Lock	LA-5060	\$79.95	\$71.95	\$63.95
	ZL Bracket to suit LA-5060	LA-5061	\$39.95	\$35.90	\$31.90
	280kg Lock	LA-5063	\$99.00	\$88.95	\$78.95
	ZL Bracket to suit LA-5063	LA-5064	\$39.95	\$35.90	\$31.90
	L Bracket to suit LA-5060	LA-5062	\$24.95	\$22.35	\$19.70
	L Bracket to suit LA-5063	LA-5065	\$24.95	\$22.35	\$19.70

IEU

Security Lights & Sales

SECURITY LIGHTING

Solar Powered 3W LED Sensor Lights

Most LED sensor lights available in the market just dont provide enough light output. These high powered CREE® LED solar sensor lights provide a very bright focused beam of light to illuminate your driveway, entry way or backyard.

Despite the extremely bright light output, they are still with exceptionally low power requirements. A waterproof solar panel is supplied with a 5m lead to keep the rechargeable batteries topped up. Each unit has a built-in PIR motion detector which automatically turns the light on from an adjustable period of 5 to 20 seconds. A fully self sustained lighting kit; these are perfect for applications where mains power is unavailable. Stylish and smart in design, they are very simple and easy to install.

Includes mounting hardware

3W CREE® LED SPOTLIGHT WITH

ADJUSTABLE SWIVEL HEAD
High output 3W LEDs for ultra bright light

Specifications	
Battery	Ni-MH battery
Detection range	100-180 degrees
Detection distance	8 metres
Solar light dimensions	95(L) x 240(H) x 137(D)mm
Solar panel dimensions	140(L) x 198(H) x 66(D)mm

Cat. SL-2707

2 X 3W CREE® LED SPOTLIGHTS WITH ADJUSTABLE SWIVEL HEADS

2 x high output 3W LEDs for ultra bright light

Specifications	
Battery	Ni-MH battery
Detection range	100-180 degrees
Detection distance	8 metres
Solar light dimensions	205(L) x 242(H) x 135(D)mm
Solar panel dimensions	140(L) x 198(H) x 66(D)mm

Cat. SL-2709

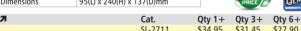
7		Cat.	Qty 1+	Qty 3+	Qty 6+
	One Spotlight	SL-2707	\$79.95	\$71.95	\$63.95
	Two Spotlights	SL-2709	\$99.00	\$88.95	\$78.95

Battery Powered 2W LED Sensor Light

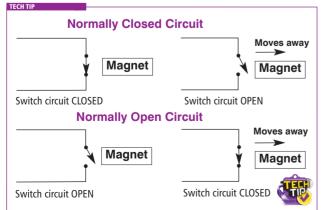
Illuminate your outdoor areas without the use of mains electricity with this 2W CREE® LED sensor light. Easily mounts to any outdoor area, this light will give you up to 180 degrees of motion detection. The angle of the light and PIR detector are fully adjustable. With an adjustable "off" delay you can program the unit to match your outdoor environment and needs. Using 4 x C size batteries you can get up to 110 days of use* before needing to change the batteries.

Based on 20 seconds of light, 15 times per day using an alkaline battery

Specifications	
High output LED	1 x 2W High Output LED
Battery use	4 x C size batteries (not included)
PIR detection range	100-180 degrees
Power consumption	600mA (when on)
Dimonsions	95(I) v 240(H) v 137(D)mm



LED Light



SAFES

CREE

Portable Aluminium Car Safe with Alloy Cable Strap

Keep your personal effects secure with this portable car safe! The clever designed locking mechanism clamps down the alloy strap across the stainless steel case and aluminum cover making this safe virtually unbreakable. Attach the included 1m alloy cable strap to your seat railing and neatly tuck it under your seat or place in the boot of your car. Perfect for keeping your mobile phones, camera's, wallets, keys or GPS's protected. Great for leaving your car at the local shopping centre car park or stranded overnight in a bad neighborhood.

-	
Specifications	
Weight	1.3kg
Aluminum thickness	2mm
Stainless steel thickness	1.2mm
Dimensions	210(L) x 150(W) x 68(H)mm

Note: Money & iPhone® not included Qty 10+ Cat. HB-5455

Biometric Finger Scan Safe

This advanced biometric safe provides a secure storage utilising biometric finger print scan for fast and simple access in just 2 seconds! It features a foam interior with an elastic retention strap for holding

your goods securely in place. Integrates a in-built flash memory which retains entered fingerprint data even during a battery failure. Ideal for

storing money, passports, jewellery, personal documents and medications safely and securely. Supplied with 1m alloy security cable and even has the facility for bolting to a secure permanent fixture. Two security keys are also provided for back up.

- Weight: 1.5kg
- Low battery warning Mounting hardware included
- Requires 4 x AA Alkaline batteries
- Dimensions: 273(L) x 190(W) x 51(H)mm



Note: iPhone® not included

Qty 1+ Qty 4+ Qty 10+ HB-5457 \$149.00 \$133.95 \$118.95

PERSONAL ALARMS

Personal Mini Alarm with LED Torch

A personal alarm made from tough ABS construction with a 120dB siren to deter thieves and attackers. To activate simply pull the rip-cord to pull out the pin. Replace the pin to deactivate the alarm. Also includes a LED light. Great for travellers.

- 105-120dB
- Practical design
- Compact size Includes 3 x LR44 batteries

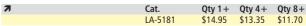
Dimensions: 72(L) x 31(W) x 22(H)mm



Personal Dual Alarm with LED Torch

Compact design, easy to carry and ideal for use on bags or as a key ring, this personal dual siren alarm is the perfect solution to vulnerable or threatening situations. Deter thieves and attackers with its loud dual 130dB sirens and powerful independent torch function which will strobe when the alarm is activated. Simply pull the rip-cord to pull out the pin. Replace the pin to deactivate the alarm. Also includes a LED light. Fantastic for travellers.

- Traditional ripcord or key chain activation
- New technology super loud siren
 Includes 4 x LR44 batteries
- Dimensions: 105(L) x 28(W) x 15(H)mm





COVERT SURVEILLANCE & SPECIALITY CAMERAS

Ultimate "Spy" Watch Camera

This unit resembles a typical "chrono" type aviator/divers wristwatch. It even keeps good time! More importantly, it will record video, in AVI format, 640 x 480 resolution. That's up to 60 minutes, also audio, subject to the unit being fully charged via the USB port. It will also take about 1200 still pictures!

You can download your video, audio or stills via a 2.5mm to USB lead supplied. Also supplied is USB

Even though this looks like a 30m+ divers' watch



Gift boxed



Camera aperture

				JEAR RESERVE
•		•	 •	

• Black ink refill available separately - QC-8024

\$62.95

\$59 50

OC-8024

4GB Pen Video Camera - 720p

Maxwell Smart would have loved to have one of these to go with his shoe phone. Capture video, audio or still photos discreetly and quickly, then transfer them onto your PC via USB. The built-in memory stores up to 8GB, so there's plenty of capacity for taking electronic notes at your next meeting or protecting your legal rights by capturing a video or audio record of an event. It also functions as a conventional ballpoint pen.

- One-hutton operation
- Recharges via USB
- Drivers included
- Record up to 1 hour of video
- Over 1,000 photos

SURVEILLAN

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Specifications	
Format	AVI, JPEG
Encoding	M-JPEG
Resolution	720p
Frame rate	30fps
Still image resolution	
Dimensions	148(L) x 15(Dia)mm

Format	AVI, JPEG
Encoding	M-JPEG
Resolution	720p
Frame rate	30fps
Still image resolution	1600 x 1200 jpg
Dimensions	148(L) x 15(Dia)mm

1		Cat.	Qty 1+	Qty 2+	Qty 4+	
	4GB Pen Camera	QC-8017	\$79.00	\$70.95	\$66.95	
	Spare Pen Refill - Black Ink	OC-8024	\$6.95	\$6.25	\$5.75	

QC-8014

LED Flashlight with HD Video Camera

A compact HD video camera with a built-in LED flashlight. Video can be recorded at 720p and the LEDs enable night time and low-light condition recording. Its compact size and features make it a handy tool for security guards

or even for home surveillance applications. The added mounting bracket is great for recording while mountain biking or the occasional night time ghost walk. It also takes photos, accepts a MicroSD (up to 32GB) card and can be used as a USB storage device.

nciudes rechargeable battery.		
Specifications		
Recording format	AVI	
Frame rate	30fps	
Recording time	up to 4 hours	
Video compression	MJPEG	
Dimensions	111(L) x 32(D)mm	

Dimensions	111(L) x 32(D)mm		PRICE	WARRANTY
7	Cat.	Qty 1+	Qty 2+	Qty 4+
	OC-8010	\$79.00	\$70.95	\$66.95

LCD Camera Alarm Clock

Looks just like an innocent alarm clock, but in fact it has a motion or sound-activated camera inside. Perhaps you suspect an employee of stealing or the babysitter of helping themselves to the contents of the liquor cabinet. Gather the evidence and find out for sure. The camera can record still photos or digital video to a 2GB MicroSD card (included) for playback on a PC Recording is activated by the IR remote or automatically by motion or sound detection

- Up to 1 hour recording time with internal memory of MicroSD card
- 12 or 24 hour display with backlit LCD
 Recharges via USB
- USB interfaceDimensions: 110(W) x 60(H) x 35(D)mm



71	Cat.	Qty 1+	Qty 2+	Qty 4+
	QC-8008	\$99.95	\$89.95	\$84.95

Rechargeable LED Torch with **Built-in Camera and Laser Pointer**

Not only is this a rugged and bright LED torch with a blinding 160 Lumen output, it also features a camera to record what is being illuminated to the supplied 4GB TF card. Great for security and surveillance applications to collect photo or video evidence or around the home to record those things that go bump in the night. Also features a rechargeable Li-ion battery and a laser pointer to help frame the subject you want to record

- Bright 2W 190 Lumens
- Up to 10 hour use from 4 hour charge
- Weatherproof IP65 rated
 Supports a MicroSD card (up to 16GB) which provides up to 8 hours of
- continuous recording)
 Dimensions: 138(L) x 24(Dia)mm
- Weight: 100g (with battery)

Specifications	
Video resolution	640 x 480
Frame rate	30fps
Image format	JPG
Video format	AVI
Audio	Built in Mic
	•





l .	Cat.	Qty 1+	Qty 2+	Qty 4+
	QC-8011	\$149.00	\$133.95	\$126.95

Warning: These cameras should not be placed in areas where there is an expectation of privacy. Such places typically are: bathrooms, bedrooms, toilets, dressing rooms etc.. Use of these devices in such locations can lead to criminal prosecution and severe penalties.

DIGITAL VIDEO CAMERAS

1.3MP Mini Digital Spy Camera

This thumb-sized clip-mount mini digital spy recorder delivers the ultimate in discrete portable photo and video recording. From business meetings to outdoor sports activities, it has limitless applications including fixed security surveillance, portable evidence collection, babysitting monitoring, web camera and general home videos. With a built-in 2GB internal memory, it also takes a Micro SD and can support up to 8GB of memory. Comes with a lanyard, USB lead, pocket clip and stand so you can use it on a bicycle, car or whatever else your imagination comes up with.

- 1.3 MP camera

- High speed recording and fast response
 Low light recording
 Manual and sound activated recording functions
- Supports AVI
- Rechargeable Li battery lasts for 2 hours of non-stop recording
 • Dimensions: 57(H) x 22(W) x 19(D)mm



7	Cat.	Qty 1+	Qty 2+	Qty 4+
	QC-8003	\$49.95	\$44.90	\$42.45

3MP Mini HD Digital Video Camera

Ultra portable HD video camera and recorder. Length of recording time will depend on card capacity and definition, but the internal memory will hold about 50 minutes of standard definition, 20 minutes of high definition video or over 3000 photos. The internal lithium battery recharges via USB and will provide about 4 hours of use. Pocket clip and desk stand included. Endless uses for sports, surveillance, business etc.

- Recording time: HD 20 minutes, SD 50 minutes 350mAh rechargeable battery recharges by USB
- 2GB internal memory supports up to 32GB MicroSD card
- AVI format
- 1280 x 720p resolution
- Weighs only 25g Dimensions: 23(H) x 78(H) x 14(D)mm



QC-8005





GIFT CARD

Can't find what to buy? Give a Jaycar Gift card and let them choose!





Timelapse Cameras

TIME LAPSE CAMERAS

Weatherproof Time Lapse HD Camera

Take amazing time lapse videos of your spring flowers opening, start to finish of the renovation, cityscapes, etc. Captures photos at pre-set time intervals between 5 seconds to 24 hours and creates an AVI video on a USB memory stick for playback on a PC. The included 2GB memory stick will store up to 30 minutes of video which contains 600 photos each minute, a total of 18,000 photos!

- 1280 x 1024 resolution
- Supports USB memory sticks up to 8GB
- Standard and Macro image (for closer shots)
- Weatherproof

- Includes 4 x AA batteries
 Supports up to an 8GB USB Flash Drive
 Software Compatible with Windows XP,
- Windows Vista, Windows 7
 Dimensions: 192(H) x 93(W) x 60(D)mm









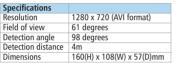


7	Cat.	Qty 1+	Qty 2+	Qty 4+
	QC-8030	\$199.00	\$178.95	\$168.95

Motion Activated Time Lapse HD Camera

Takes photos whenever it detects movement and creates a time lapse video to playback later on a PC. Perfect to put at the front door or secured areas to see which uninvited guests visited, to record what mischief your pet got up to while you were out, to take photos of birds at their nest or feeder, etc. Once the PIR detects movement it will capture 30 frames in 30 seconds and store that video onto a SD memory card.

- Supplied with mounting holder, suction holder, 4 x AA batteries and 2GB SD memory card.
- Includes 4 x AA batteries















7	Cat.	Qty 1+	Qty 2+	Qty 4+
	QC-8032	\$249.00	\$225.00	\$215.00

Time Lapse HD Video Camera with LCD Viewfinder

Create amazing time lapse videos in high definition with this clever time lapse camera. It captures images at a preset intervals between 1 second to 24 hours and creates an AVI video file that you can playback later. Setup and operation is easy; simply use the LCD viewfinder and 120 degree rotatable lens to frame your subject, set the time interval, and start capturing. The video on the included 2GB SD card can be played back on a computer, media player, suitable TV or digital photo frame. The supplied 4 x AA batteries can capture 300,000 frames. It can also be powered from the USB port of a computer (USB cable

Specifications	
Video format	AVI
Resolution	1280 x 720, 640 x 480
Field of view	59 degrees
Focal length	36mm (35mm equivalent)
Focus distance	75cm (Minimum)
Time Interval	from 1 second to 24 hours
Memory storage	SD Card (Supports up to 32GB)
LCD Screen	1.44" Colour TFT
Power Source	
Battery	4 x AA (included)
DC	5VDC (Micro USB connector)
Dimensions	106(H) x 64(W) x 46(D)mm
Weight	120a











7	Cat.	Qty 1+	Qty 2+
	QC-8034	\$249.00	\$225.00

SPORTS CAMS

1.3MP Digital Video Sports Camera

You could be the next star on Fuel TV and make your own action sports videos. The camera straps onto your helmet and has a super-sticky adhesive mount to keep it in place. It has simple one-button operation to start and stop recording and uses SD cards up to 32GB for storage. Mountain biking, skateboarding, BMX, skydiving, bungee jumping etc.
• Requires 2 x AAA batteries.

Specifications	
Video resolution:	640 x 480 @ 30 fps
Imaging sensor:	1.3MP
Dimensions:	90(L) x 50(Dia)mm





7	Cat.	Qty 1+	Qty 4+
	QC-3238	\$39.95	\$35.90

Waterproof Sport Action Camera

If you like sport you will love this handy action camera with 360° rotating base. Mount it onto your bicycle or motorcycle handle bars and record every bump and jump straight to a MicroSD card with up to 32GB of storage. Designed for wet weather conditions and includes an optional helmet strap. USB & TV out cables also included for TV & PC CAM mode, driver installation required.

Specifications	
Resolution	1.3MP
Video resolution	720 x 480 @ 30 fps
Battery	Rechargeable Lithium battery
Ingress protection	IP67
Supports	Windows 2000, ME, XP & Mac OS X
Dimensions	87(L) x 20(Dia)mm
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7	Cat.	Qty 1+	Qty 4+	Qty 10+
	QC-8012	\$69.95	\$62.95	\$55.95

Mini Waterproof HD Video Recorder

SURVEILLANCE

Record every turn, twist and jump with this waterproof HD mini camcorder. Strap it onto your vehicle, head, goggles or helmet and start recording directly in 720P high definition video. It directly records to a MicroSD card with up to 32GB of storage. Light weight and durable it's great for capturing all your motorsports, water sports, cycling, skateboarding or hunting adventures. With a built-in light weight and high capacity Lithium-Polymer battery, it will provide countless of hours of operation and recharges via a USB cable included



Camera Mount for Motorbikes & Bicycles

This unit enables you to mount a video or still camera clamped to the handlebars of a bike via a standard 1/4" mount. Virtually unlimited movement, thru horizontal, vertical etc. is allowed. Your valuable cameras can be removed quickly and safely via a spring-loaded locking mechanism.

- Handle bar clamp range from 21 to 28mm dia.

• Dimensions: At max neight 75(H) x 44	I(VV) X OU(L)IIIIII	
7	Cat.	Qty 1+
	QC-3805	\$6.95



DID YOU KNOW...

John Vincent Atanasoff, J. Prespert **Eckert and John W. Mauchly**

Theses are the inventors who are also credited with inventing 20th century modern computers; their creation was called 'Electronic Numerical Integrator and Computer' (ENIAC) in 1946.

RC VEHICLE CAMERAS

Helicopter Spy Cam

This tiny camera measures 80mm long and 19mm round and is designed to mount on a model helicopter - yes, a helicopter! It comes with a special bracket for the purpose. It can, of course mount on other stuff, such as model planes or cars as well. It weighs less than 30 grams. It features a ball swivel lens like you see on real military helicopters and delivers its recorded video to your computer via a mini USB port, which also recharges the camera battery.



- 4GB internal memory
- 4 hour recording time
- Continuous recording or
- programmable still photo recording
- Audio recording
 Shockproof construction

Specifications	
Viewing Angle	90°
Lens Rotation	60°
Dimensions	80(L) x 19(Dia)mm



See our Gadget section for more information on this beaut product!

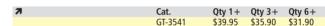
7	Cat.	Qty 1+
	OC-3820	\$59.00

Video Camera Kit for RC Models

Now you can capture all those amazing moments from your remote control adventures. Mount the camera unit to a remote control car, truck; and being featherweight can also be mounted on to helicopters Video capture format is 640x480 pixels at 30fps and is recorded onto the included 512MB Micro SD Card, Videos can be uploaded to your Mac or PC through the MicroSD to USB Adaptor. Custom wiring and mounting will be

Kit contains:

- Camera module • 512MB MicroSD
- Card MicroSD to USB Adaptor
- Mounting screws
- and screwdriver Dimensions: 55(L) x 32(W) x 10(H)mm



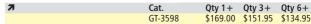
Wi-Fi iPad® iPhone® iPod® Controlled **Rover with Adjustable Camera and IR**

Have endless hours of fun, sneaking up on your family and friends with the Wi-Fi iPad® / iPhone® / iPod® controlled rover. Take control of the rover by downloading the free app from the iTunes® App Store, installing it on your device, and then connecting to it via a Wi-Fi network. To drive the rover, use the touch screen interface provided by the app or enable G-Drive mode and tilt your device like a steering wheel. An onboard camera streams live video of the image directly in front the rover, allowing you to continue driving even if it's out of sight, behind walls, etc. Don't let complete darkness deter you from your exploration, turn on the IR lamp and continue your journey. Or be a spy, take snapshots as you move along or listen in on your subject using the built-in microphone. The rover runs on 6 x AA batteries (not included) and has a range of up to 60m, unobstructed

iPad® not included

- Built-in microphone for live audio streaming
- Onboard camera for live video stream or to take snapshots
- Night vision mode via IR illumination
- Range up to 60m depending on obstruction.
- G-Drive Mode, tilt your device like a steering wheel Requires 6 x AA batteries (not included)
- Free app via the iTunes® App Store
- Weight: approximately 1.04kg Dimensions with antenna: 196(L) x 260(W) x 196(H)mm

Note: iPad® not included



DVR Monitoring Systems

CAMERA / MONITOR KIT

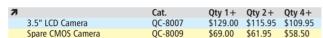
3.5" LCD Camera Kit

A surveillance kit that offers a stand-alone, cost-effective turn-key solution. All you need to do is connect power and install the camera where you need it. The 3.5" TFT LCD gives you

real-time video monitoring and the microphone in the camera provides audio either through the speaker in the display unit or via headphone outlet. The LCD unit is able to take two AV inputs, so you can add a second camera if required. The camera has a CMOS sensor with IR illuminator and 20m power/video cable. Mains plugpack



- 20m cable
- Dimensions: 130(W) x 80(H) x 22(D)mm
- Spare CMOS Camera Cat QC-8009



MONITORS / RECORDER

2.8" TFT LCD Monitor / AV Recorder

The smallest and lightest LCD monitor on the market with a multitude of applications. A BNC adaptor cable is included so it can be used to monitor CCTV cameras or

as a covert surveillance tool. The more sporting will find it useful for recording the next mountain biking adventure or track day. Video and audio are recorded to an SD card and can be played back through the unit or via the AV out to an external monitor or TV. Rechargeable and ultra-portable, complete with AV lead, instruction manual and charger.



Specifications	
Screen size	2.8"
Resolution	480 x 234
Power	5VDC (with built-in rechargeable battery)
Power consumption	1.5W
Weight	Approximately 90g
Video input	PAL
Dimensions	88(L) x 58(W) x 17(D)mm



71	Cat.	Qty 1+	Qty 2+	Qty 4+
	OM-3824	\$129.00	\$115.95	\$109.95

DVR MONITORING SYSTEMS

Motion Activated Outdoor Camera with Flash

A weather resistant outdoor camera for a wide range of outdoor applications, including surveillance around the home, office or warehouse, or for wildlife applications. The PIR sensor with 5-zones waterlouse, or low minine applications. The First Seriod With 3-2ones for wide angle detection triggers the 7MP camera for colour photos and videos by day or monochrome photo and videos by night. Night vision is assisted using the bright IR flash, which illuminates objects up to 15m away. Photos and videos up to 90 seconds long are recorded to its 32MB internal memory or an SD Card (available recorded to its 32MB Internal memory or an SD Card (available separately) for more storage. Playback the vision with audio on the integrated 2.4" colour LCD screen while in the field, or by connecting to a PC. Other features include a fast 1.3sec fast trigger time, highly sensitive microphone, TV output, and security lock hole for a padlock. Power is provided by 4 x D and 3 x C batteries. We recommend Alkaline batteries for longer operation. Supplied with USB and AV cable PC software mounting stranged laps bond. cable, PC software, mounting strap and lens hood. Visit our website for more details and video demonstration.

- 7MP camera Rapid-pulsing infrared technology.
 Fast trigger time 1.3s at turbo mode.
- Separate controls for camera and sensor
- Time and Date stamp
 Built-in 2.4" TFT screen and voice memo recording to keep vocal track in the field.

QC-8006

- 5 zones PIR lens for wide angle detection range
 1-3 Quick Shots setting.
- Supports up to 2GB SD Card





& batteries not included

- Video resolution: VGA 640 x 480 30fps
 Power: 4 x D and 3 x C batteries not included • Pause time: 0-90 minutes / Video length:
- 3-90s for day and night. Supports up to 2GB SD card

- Weight 640gm without batteries
 Dimensions: 192(L) x 104(W) x 90(H)mm



7	Cat.	Qty 1+	Qty 2+	Qty 4+
	QC-8036	\$189.00	\$169.95	\$160.95

Mini DVR Kit with Button-Hole Camera

This could be the ultimate personal surveillance tool Producing high definition video and audio you can capture meetings, conferences or lectures. The mini DVR stores up to 32GB on an SD card, then you can view the video on the LCD screen or download to a PC. The kit includes a pinhole camera with different buttonhole options so it's completely covert and discreet. Also included is a Li-ion rechargeable battery, charger, AV leads, USB cable and dummy buttons for disguising

- Li-ion battery
- Recording resolution: Up 720 x 576
- SD card support up to 32GB about 10 hours of video
- 128MB flash memory
- 2 inch TFT LCD screen
- Camera resolution 420TV lines
- . Min illumination 3 lux
- USB interface
- Windows XP, Vista, 7 compatible
- Dimensions: DVR: 65(W) x 54(H) x 14(D)mm Camera: 22(W) x 34(H) x 15(D)mm





Qty 2+

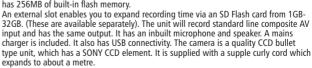
\$199.00 \$178.95





Mini DVR & Bullet Camera Package

This unit enables you to record your skydiving, abseiling, snow skiing, mountain bike riding, motorcycle and car racing and other adrenaline pumping experiences to re-live later. This system consists of a 2.5 screen Digital Video
Recorder/Monitor which
has 256MB of built-in flash memory.



- AC mains charger, USB driver disc, USB lead, AV in/out cable
- · Leather case
- Camera bracket and lots of mounting hardware for bike/body mounting Camera Dimensions: 60(L) x 14(D)mm
- Monitor/Recorder Dimensions: 75(W) x 55(H) x 20(D)mm



Qty 4+	7	Cat.	Qty 1+	
\$168.95		QC-8015	\$199.00	



WIRELESS BABY MONITORS

DIGITAL Wireless Audio Baby Monitor

Transmits audio wirelessly up to 50m. Features a night light function which can be set to turn on when movement is detected, adjustable volume and low battery indication. It plays music with five preprogrammed lullabies, and the parent unit alerts you if the room temperature is above/below the chosen setting. It has a belt clip and

talk button key so you can actually talk to the baby as if you are in the room. The baby unit is equipped with rechargeable docking station. Units are both mains and battery powered.

• Transmission: 1 8GHz

- Requires 3 x AAA batteries
- · Built-in mic and speaker
- Dimensions: 98(H) x 103(W) x 44(D)mm

Parent unit:

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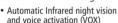
- Rechargeable 2.4V Ni-MH battery (included)
- Built-in speaker
 Dimensions: 125(H) x 60(W) x 20(D)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	QC-3261	\$69.95	\$62.95	\$55.95

Budaet

DIGITAL Wireless 2.4GHz Baby Monitor System with Portable LCD & Night Vision

Monitor your baby sleeping or your kids at play in the backyard. Features a portable 2.4" colour LCD and CMOS colour camera with inbuilt mic. The monitor unit recharges in the included charging cradle, giving you hours of non-stop wireless audio/video surveillance. With 2.4GHz digital transmission, signals are more stable, clearer and interference free up to 100m range. The camera unit features infrared night vision and voice activation mode to alert of every sound & movement throughout the night.



- and voice activation (VOX) Rechargeable Lithium battery and recharging cradle for monitor unit
- Adaptor or battery
- powered camera unit

 4 channel operation





DIGITAL 2.4GHz Wireless Baby Monitor

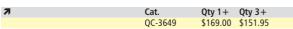
It is 100% digital in which it avoids interference from other electronic devices, has an in-built infrared night vision, for round the clock monitoring and is wireless it also forwards you super clear picture and sound onto the 7" monitor. This new baby monitor will appeal to parents who want the very best for their new born

Note: This device can also be used for security to monitor unwanted predators

- 4 channel, support 4 cameras for one monitor
- 7" LCD colour screen
 Infrared night vision
- High sensitivity
- microphone · 2 way communication
- VOX function

Includes

- 1 x 6V DC adaptor
- 1 x 12V DC adaptor
- 1 x AV cable



2.4GHz DIGITAL Wireless Pan/Tilt/Zoom Child Monitor/General Surveillance System

This is the ultimate child monitoring system. You could watch a room full of children and pan across to zoom onto any one of them. Indeed, you could use it to monitor a swimming pool, retail showroom, or factory. You can remotely pan or tilt the camera from your desk from the viewing monitor.

- High quality
- microphone & speaker
 2.4" LCD monitor screen
- · 2 times digital zoom 4 senarate channels
- Includes power adaptor for both units
- Reciever requires: 4 x AAA batteries
- 2.4GHz DIGITAL wireless transmission
- Range: 100m line of sight
- CMOS image sensor (640 x 480 pixels)
- View angle 55°, low light, with IR LED assist, 5m range
 Camera pans 270°, tilts 120°
- Dimensions: Camera unit: 112(W) x 109(D) x 133(H)mm Monitor unit: 68(W) x 26(D) x 149(L)mm



Spare 2.4GHz Pan/Tilt/Zoom Digital Camera available separately Cat. QC-3637

7		Cat.	Qty 1+
	Surveillance System	QC-3638	\$199.00
	Additional Camora	OC-3637	¢00 nn

RELATED PRODUCT

Full range of wired and wireless reversing camera kits are on page 402

PIR Driven Security Camera

This unit will take a still photograph in 640 x 480 resolution in JPEG format when triggered by a moving object, typically a human when passing in front of the camera. It is intended to record trespass and other illegal activity. Its best focal range is between 2.5 & 4.0 metres. Included is 16MB of internal memory, which will store up to 200 pictures. The unit also records to an SD card (not supplied). You can install an SD card with up to 2GB capacity, which stores 26,000 pictures. You can download pictures to your computer via a USB lead supplied. The system requirements are all PC based, i.e. Windows 2000, Vista, XP or Windows 7 no extra software needed.



Includes warning surveillance sticker
 Case dimensions 130(H) x 95(W) x 35(D) mm



Warning: This camera should not be placed in areas where there is an expectation of privacy. Such places typically are: bathrooms, bedrooms, toilets, dressing rooms etc. Use of this device in such locations when caught, can lead to criminal prosecution and severe penalties.

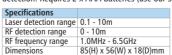


7	Cat.	Qty 1+	Qty 2+	Qty 4+
	QC-8013	\$59.95	\$53.95	\$50.95

RF BUG AND CAMERA DETECTORS

Camera Detector

Protect your privacy! Covert cameras and listening device are nearly impossible to spot by the naked eye. This handy little unit will detect hidden wired and wireless cameras through the units lens finder. The 6 pulsing LEDs reveals the location of a camera by illuminating it's lens when you look through the lens viewer. Also features a built-in wireless RF detector that provides audible (buzzer) and visual (LED) signal strength indication. Great for detecting wireless transmitters and eavesdropping devices. It even comes with a set of earphones for complete discrete bug detection. Requires 2 x AAA batteries (use our SB-2426).







ty 1+	Qty 4+	Qty 8+	
99.00	\$88.95	\$78.95	





Cat.

Inspection Cameras

BUG DETECTORS

RF Bug Detector

Make sure your private conversations stay private with this mini RF bug detector. The super sensitive broad band tuner will detect radio transmissions from bugging equipment operating between 50MHz and 6,000MHz (6GHz) and alert you to them via a three stage LED indicator and beep alarm. The faster the beep, the stronger the signal being detected. The unit can also be operated in silent mode with the built-in vibrator or by using the mini earphone supplied.

Other features include:

- RF sensitivity control

- "Battery low" warning light
 Handy belt clip
 Dimensions: 55(W) x 92(D) x 25(H)mm
 Weighs just 130 grams with batteries
- 2 x AAA batteries supplied

7	Cat.	Qty 1+
	QC-3430	\$99.00

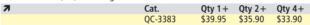
USB INSPECTION CAMERAS

USB Mini Inspection Camera - 2m

Add a laptop as a monitor and you have a compact inspection camera for probing into all manner of places - checking for termites and other rodents, insulation, finding lost tools etc. The camera is only 10mm diameter and has two variable intensity LEDs for illuminating the area

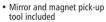


- · USB powered
- Built-in snapshot button
 Image resolution: 640 x 480 pixels at up to 30fps
- Dimension: 10(Dia) x 2m long



USB Mini Inspection Camera - 7m

Use your laptop as a monitor and you have a compact inspection camera for probing into all manner of places - checking for termites and other rodents, insulation, finding lost tools etc. The camera is only 10mm diameter and has four variable intensity LEDs for illuminating the area under examination, and has a 7m long cable to allow you to get into the deeper places that can't be reached with a shorter cable.



- Software included
- USB powered
- Built-in snapshot button
- Image resolution: 640 x 480 pixels at up to 30fps
- 7m long cable Dimension: 10(Dia)mm x 7m long

7	Cat.	Qty 1+	Qty 2+	Qty 4+
	QC-3371	\$59.95	\$53.95	\$50.95

CCTV IN-FIELD MONITORS. INSPECTION CAMERAS

Inspection Camera with 2.4" LCD



some very tight spots is possible. Its comfortable grip and forward facing controls make it easy to detect and diagnose the inaccessible. 9mm camera head for up-close visua inspections in tight spaces. Requires 4 x AA batteries.

- Forward facing controlsAdjustable brightness LED illuminator

•	Ad	justable	LCD	brighti	ness	

Extension Shaft 2m

	Specifications	
	Sensor	CMOS
	Display	2.4" colour LCD
	Resolution	480 x 234 pixels
	Reach	1m
	Attachments	Mirror, hook & pick-up magnet
(at.	Qty 1+ Qty 2+ Qty 4+

\$88.95

\$99.00

	Attachments	Mirror, I	nook & pick-	up magnet
	Cat.	Qty 1+	Qty 2+	Qty 4+
ection Camera	OC-8710	\$169.00	\$151.95	\$143.95

QC-8702

Inspection Camera with Record Detachable Wireless Screen



With a 9mm diameter and four LEDs, the head of this inspection camera can capture video and pictures in confined and dark locations. The head and flexible boom being IP67 rated enables them both to be submerged in water during operation (however the base unit and LCD cannot get wet! Caution!).

Included is a 2GB MicroSD card on which video and pictures can be recorded. These files can then be viewed on a TV with the included Video out cable or saved onto a PC via the USB cable included.

The 3.5" LCD is detachable from the handle, which receives a wireless transmission from the camera. This enables more flexibility during operation, i.e. you can hold and manoeuvre the camera with one hand whilst keeping the LCD in full view in the other hand all the time. It makes operation easier

- 2GB MicroSD card included (accepts up to 16GB)
- IP67 rated Camera and Flexible boom

CRAZU

- 4 white LEDs
 Three useful accessories hook, mirror, magnet.
- Strong plastic carry case 4 x AA batteries required for camera handle
- USB cable included Video out cable included
- Power supply 5VDC 1A included

Dimensions	
Monitor	100 x 70 x 25mm
Camera Diameter	9mm
Camera handle	86 x 145 x 41mm
Flexible boom	1m

Specifications	
Photo & Video resolution	640 x 480
Video memory usage approx.	27MB/min - With 2GB MicroSD card approx.
Photo memory usage approx.	75kB - With 2GB MicroSD card approx.
LCD	3.5"
Wireless transmission frequency	2.4GHz
Lithium-ion battery in LCD	3hour Charge, 2 hour usage.



71	Cat.	Qty 1+	Qty 2+	Qty 4+	
Inspection Camera	QC-8712	\$299.00	\$269.00	\$255.00	
Extension Shaft 2m	QC-8702	\$99.00	\$88.95	\$83.95	

Handheld Micro Inspection Camera 17mm



The new Digitech handheld micro inspection camera allows you to perform a detailed visual inspection in hard to reach areas. Its pistol grip design and detachable wireless 2.4GHz monitor make it easy to locate and diagnose the unreachable. The wireless monitor features composite video out so you can hook it up to a larger screen for viewing the finer details. Ideal for security, law enforcement, building and pest inspectors etc. All tucked away in a neat carry case with room for a gooseneck extension (see part QC-8702) Requires 4 x AA batteries

2m Gooseneck Extension Cat QC-8702

Specifications - Camera		
Image sensor	CMOS	
Resolution	704 x 576 pixels	
Horizontal viewing angle	50 degrees	
Minimum illumination	0 Lux (with LED lighting)	
Dimensions (mm)	186(W) x 41(H) x 145(D) (excluding gooseneck)	
Specifications - Monitor		

Specifications - Monitor	
LCD Screen Type	2.5" TFT-LCD
Effective pixels	480 x 240
Current draw (Max)	450mA
Dimensions (mm)	100(W) x 70(D) x 30(H)

7	Cat.
Inspection Camera	QC-8700
Extension Shaft- 2 metres	QC-8702





Qty 1+	Qty 2+	Qty 4+
\$199.00	\$178.95	\$168.95
\$99.00	\$88.95	\$83.95

DIGITAL VIDEO RECORDER KITS

7" LCD Monitor Surveillance Kit with 2 x CMOS Cameras

Simple, cost-effective surveillance solution for small scale indoor applications such as shops and small offices. The kit consists of everything you need to be up and running in a few minutes. All powered from one plugpack, all power and video is run along a single integrated cable. The LCD monitor also has an audio input to add a microphone if required.

- 7" LCD monitor (OC-3640)
- 2 x CMOS colour cameras

Camera & Monitor

- 2 x 18m cables
- Mains adaptor
- Remote control

	- Woulding brackets			
	Specifications			
	Resolution	480 x 234		
	Aspect ratio	16:9		
	Dimensions	186(W) x 86(H) x 30(D)mm		

Cameras Specifications				
Sensor	1/4" CMOS			
Resolution	420TV Lines			
Lens	4.3mm			
Dimensions	85(L) x 46(Dia)mm			









WIRELESS CAMERA & DVR KITS

2.4GHz DIGITAL Wireless Mini DVR Kits

An easy to setup and operate DIGITAL wireless video recording system, which is suitable for a range of security and monitoring applications. DIGITAL transmission means it operates interference-free on the 2.4GHz band. Digital transmission over 2.4GHz is the latest technology, adopting it enables clear image transmission unlike the older analogue transmission over 2.4GHz that is now plagued by interference due to the over crowding of the frequency.

Once the system is installed and running you can view the settings on the easy to navigate interface, set manual recording, schedule recording for certain times of the day or set it to record whenever motion is detected. The cameras all have a motion sensor built in that is designed to pick up the movement of people, this makes the motion detect record more reliable than inferior software based systems. The ability to switch between QVGA (320 x 480) or VGA (Higher quality 640 x 480) is configurable through the quality settings screen.

Once you've captured your footage pop out the SD card (not included) from the receiver and slot it into your PĆ or Mac to playback. Ensure you have XviD, DivX or the FFDShow codec and a suitable player such as VLC or DivX player.

DIGITAL WIRELESS RECEIVER DVR & CAMERA KIT

· Wireless receiver DVR that connects to your existing monitor or TV

Power consumption: 280mA

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• 1 x motion-sensing DIGITAL Wireless colour day/night camera with ball and

socket mounting bracket Channel hopping to prevent interference or jamming

• Dimensions: 110(L) x 79(W) x 22(H)mm Cat. QC-3631



DIGITAL WIRELESS RECEIVERS

Specifications (Common to both receiver models)

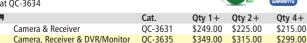
Receivers - Specifications	
Transmission frequency	ISM 2.400~2.483GHz (DIGITAL)
Unobstructed effective range	100m (line of sight)
Supports	640 x 480 @ 10fps or 320 x 240 @ 25fps
Spread spectrum	FHSS
Modulation mode	GFSK
Receiving Sensitivity	-81dBm

- · Expandable to four cameras (Use QC-3634 Additional Camera) SD Memory Card slot takes a maximum of 32GB (SD card not included - use our XC-4982 available separately)
- · Wall mounting kit included
- Remote control included
- Power adaptor
- Detachable antenna

DIGITAL WIRELESS ADDITIONAL CAMERA

Suits either kit - sold separately

Cat OC-3634



OC-3633

OC-3634

motion-sensing colour day/night camera with a channel hopping algorithm to prevent interference or jamming from other wireless sources. The camera has a ball and socket mounting bracket so the camera can be rotated through a range of viewing angles. The basic Kit (QC-3631) has a wireless DIGITAL receiver DVR that connects to your existing monitor or TV and the other unit (QC-3635) incorporates a 7inch LCD monitor with DVR and a wireless DIGITAL receiver built-in. Both systems are expandable up to four cameras. Quad view or single camera views are user selectable. The QC-3635 LCD monitor/receiver combo incorporates an intercom function between the camera and receiver. DIGITAL wireless cameras are sold separately (QC-3634).

The DIGITAL Wireless Solar Powered Camera (QC-3633 sold separately) is perfect for places where accessing mains power is difficult or just an unwanted hassle. Supplied with a solar panel and battery this unit is self sufficient. It allows the sun to recharge the battery pack making it virtually maintenance free.

DIGITAL WIRELESS RECEIVER / DVR / 7" LCD & CAMERA KIT • Wireless receiver DVR with 7" LCD

Two models to choose from, both include one wireless DIGTAL

- Power consumption: 850mA
- 1 x motion-sensing DIGITAL Wireless colour day/night camera with ball and socket
- mounting bracket Channel hopping to prevent interference or jamming
- Intercom function between
- receiver and cameras Dimensions: 182(L) x 120(W) x 35(H)mm

Camera Specifications Transmission frequency

Night vision distance

Min Illumination

Cat. QC-3635

Built in

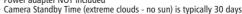


- Viewing angle Diagonal 55 degrees
- Ingress Protection Rating IP56Microphone for audio surveillance
- Power consumption: Max 350mA
- 1 x Power adaptor included (Not included for Solar Powered Camera)
- 1 x mounting stand
- 1 x Detachable antenna
- Camera dimensions: 185(L) x 70(W) x 56(H)mm

DIGITAL WIRELESS SOLAR POWERED CAMERASuits either kit - sold separately

Specifications (In addition to camera features listed above)

- Solar panel 9V 390mA
- Mounting bracket for solar panel supplied
- 10m power extension cable for solar panel
- Battery pack supplied
- Power adapter NOT included



• Solar panel dimensions 200(L) x 150(W) x 3.5(W)mm Cat. QC-3633







Solar Wireless Camera

Freecall order hotline: 1800 022 888

\$189.00

\$139.00

\$169.95

\$124.95

\$160.95

\$117.95

Packages - Network DVR & Camera - H.264

NETWORK DIGITAL VIDEO RECORDER KITS - H.264

H.264 is a video compression technology and is also known as MPEG-4 AVC. Developed for use in high definition systems such as HDTV, Blu-ray and HD DVD as well as low resolution portable

devices, H.264 offers better quality at lower file sizes than both MPEG-2 and MPEG-4. What this means is you get many more hours of video footage on a given hard drive than before.

View live or recorded footage on a 3G phone/iPhone® phone not included



Note: All DVR camera kits that have the ability to view live & recorded footage on your Smartphone/iPhone® require you to download the FREE App from iTunes®. This App is for single users' use. Additional Apps are also available for purchase that provides search and backup functionality.

DVR Camera Kit Quick Comparison Table

Cat No.	DVR Specifications					Camera Specifications Systems			Page		
	Channels	Compression	HDD Size	Network	Smart Phone Access	Push Notification	Cameras	Туре	Wired or Wireless	Includes Monitor	
QC-3640	2	N/A	N/A	No	No	No	2	CMOS	Wired	7"	470
QC-3631	4	AVI	SD Card	No	No	No	1	CMOS	Wireless DIGITAL	No	470
QC-3635	4	AVI	SD Card	No	No	No	1	CMOS	Wireless DIGITAL	7"	470
QV-3028	4	H.264	500GB	Yes	Yes	No	4	CMOS	Wired	No	471
QV-3030	4	H.264	320GB	Yes	Yes	No	2	CMOS	Wired	10"	471
QV-8106	4	H.264	500GB	Yes	Yes	No	4	CCD	Wired	No	472
QV-8110	4	H.264	500GB	Yes	Yes	YES	4	CCD	Wired	No	472
QV-8120	4	H.264	500GB	Yes	Yes	No	-	-	Wired	No	473
QV-8122	16	H.264	500GB	Yes	Yes	No	-	-	Wired	No	473
QV-8124	16	H.264	1000GB	Yes	Yes	No	-	-	Wired	No	473

Network 4 Channel DVR with 4 Outdoor Colour Camera Kit

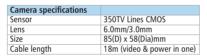
These DVR kits are becoming common to homes and businesses alike as they offer exceptional value and all round day and night visual access to your premises. This DVR comes with 500GB of storage for over 300 hours of continuous video recording, as well as four cameras to cover all of the important areas. If that's not enough, the DVR also supports backup via USB drive. Live recording can be initiated manually or pre-programmed. With the help of a Smartphone/iPhone® (via installed app) or the Internet, you can log into your system from anywhere and view live and recorded footage.

- DVR Features:
 Multi-channel support
- iPhone® / Smart phone support
- Real time monitoring
- Motion triggered recording
 Alarm notification via email
- Automatic recovery after power failure
- Video loss alarm
- Password protection PTZ compatibility via RS-485 port
- Backup to external USB drive
- Mains adaptor included

Camera features:

- Outdoor weatherproof enclosure
- Infrared LEDs for Day/Night operation
 Integrated mounting bracket
- Power supplied from DVR

H 254 4CH Digital Votan Racant
H.264
NTSC/PAL
4-ch BNC input/ 2-ch BNC output/ VGA Output
704 x 480 / PAL: 704 x 576
NTSC CIF 352 x 240 / HD1 704 x 240 / D1 704 x 480
PAL - CIF 352 x 288 / HD1 704 x 288 / D1 704 x 576
Constant, Scheduled or Motion Triggered
Built-in RS-485 / support PELCO-P and PELCO-D
300(L) x 210(W) x 50(H)mm









footage on a 3G phone/iPhone® 3G phone not included

500GB

HARD DISK DRIVE



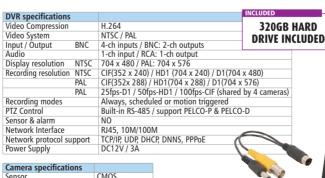
7	Cat.	Qty 1+	Qty 2+	Qty 4+
	QV-3028	\$549.00	\$495.00	\$469.00
7	Cat.	Qty 1+	Qty 4+	Qty 10+
Spare Cameras	QC-3239	\$59.95	\$53.95	\$47.90

Network 4 Channel DVR and Camera Kit with Monitor

DVR kits have proven to be extremely popular and for good reason: they not only offer exceptional value for the security dollar, but also offer a simple turn-key solution for the first time user. The main feature is the Smart Phone support and the iPhone® app you can download from iTunes® to view live or recorded footage*. The only way the DVR could be made better is by combining it with a monitor - exactly what this model

does and gives you everything you need to get a surveillance system up and running. Two cameras are included and the HDD in the DVR has a 320GB capacity. Recording can be started manually, by programming or by a triggered alarm condition. Monitoring may be done real-time on a VGA monitor or on a LAN network by several users at once and the DVR can be controlled either by mouse or the IR remote control.

- App is free for single use and may incur a charge for multi-user
- iPhone® and Smart Phone support
 H.264 Compression
- Real time monitoring
- ADPCM audio compressionMultiple record and alarm modes
- Motion trigger recording
 Alarm notification via email
- 3G mobile phone monitoring
 Support D1, HD1 and CIF
- recording resolution
 Remote live viewing
- Auto recovery after power failureVideo loss alarm
- · Password protected
- PTZ function via RS-485 port
- IR Remote Control & USB 2.0



Camera specifications	
Sensor	CMOS
Resolution	350TV lines
Illumination	Inbuilt Infrared
Operation	Day / Night









View live or recorded

footage on a 3G

phone/iPhone®.

3G phone not included

7		
	DVR & 2 Camera Kit	
	Video & Power Din Adaptor	NEW
7		
	Spare Cameras	

Cat.	Qty 1+	Qty 2+	Qty 4+
QV-3030	\$649.00	\$585.00	\$555.0
QV-3031	\$9.95	\$8.75	\$8.25
Cat.	Qty 1+	Qty 4+	Qty 10
QC-3239	\$59.95	\$53.95	\$47.90



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Packages – Network DVR & Camera – H.264

NETWORK DIGITAL VIDEO RECORDER KITS - H.264 (CONTINUED)

D1 Resolution DVR Kit with 4 IR CCD Cameras

This complete surveillance package contains a full function multiplexing DVR with Ethernet access, four weatherproof CCD cameras with IR illumination, and four 20m camera cables. Ideal for any small business or residential location the cameras will provide vision in total darkness, while the video output will connect to an existing television screen or computer monitor for viewing in real time. Alternatively connection to a computer network will allow remote access viewing from anywhere with an internet connection.

The included DVR incorporates a 4 channel multiplexer, Ethernet functions, H.264 video compression, and even delivers D1 (704 x 576) resolution video (playback, live view, & recording) at 100 frames per second. Use it to record all 4 cameras simultaneously with playback available locally, via a network connection, or using an iPhone® or Smartphone app*. The impressive features include composite video inputs, composite and/or VGA monitor output, motion trigger recording, video loss detection, remote network control and view, and USB back-up support. Supplied with a 500GB HDD fitted software & manual on CD, power supply, and quick start guide.

* Free app available to view live footage. Application based searching and backup requires advanced version at an additional cost.

DVR Specifications	
Video compression format	H.264
Video input	4 channels composite
Video output	Composite video, VGA
Recording Resolution	352 x 288 (CIF) 704 x 576 (D1)
Max Recording Frame Rate	100 IPS
Hard disk storage	500Gb SATA
Back-up	USB & network remote back-up
Web transmitting/compression format	H264
Ethernet	10/100 Base-T
Power supply	19VDC 2.1A (included)
Dimensions	343(W) x 240(D) x 68(H)mm

Camera Specifications	
Sensor	1/3" CCD
Sensor resolution	(H x V pixels) 512 x 582
Horizontal resolution	420TV Lines
Min. Illumination	0.4Lux / F2.0, 0Lux (IR ON)
IR illumination	14 LEDs
Effective range	Up to 10 metres
Lens	f3.6mm / F2.0
Lens angle	92.6°
IP rating	IP66
Power source	12VDC
Current draw	90mA (IR OFF), 210mA (IR ON)
Dimensions	116(L) x 60(W) x 79(H)mm

Qty 1+ Qty 2+ Qty 4+ \$749.00 \$675.00 \$639.00





500GR HARD

DRIVE INCLUDED

HEHR)

Network 4 Channel IVS DVR Kit 500GB with 4 Cameras

Cat.

QV-8106

Make your security measures smart with the use of the Intelligent Video Surveillance DVR kit. Three standard infrared cameras keep an eye on your premises, whilst a human motion detection camera constantly scans for intruders. The DVR itself features a vast array of complex sensory functions to perform such functions as flow counting, one-way pass areas, scene change detection, and much more.

The human detection camera is an extremely powerful device that can be used to trigger alarms when human presence is detected. All of these events can be configured to trigger alarms or push notifications to your mobile. Push notifications are supported by the iPhone®, Smartphones and iPad®, using the downloadable surveillance app.

Of course you can monitor via Ethernet or internet connections, or connect an external monitor & mouse to control all functions quickly and simply. The internal SATA hard drive is interchangeable, so you can store old surveillance footage easily.

DVR Features:

- Complex functions for flow counting,
- one-way pass, scene change
 Four channel split-screen or single

DVR & 4 Camera Kit

- channel switching display
- USB 2.0 interface for external backups
 USB 2.0 interface for external mouse
- Supports most smart phones using
- downloadable app
- 4-channel audio/video input
 Motion trigger alarms
- Motion trigger alarms500GB SATA hard drive

Human Detection Camera Features:

- Push notifications to mobile (via DVR)
- High accuracy infrared sensor for human detection and push notifications
 Supports DVR Camera Communication
- Supports DVR Camera Communication System, (DCCS) Technology. The PIR cameras does not need RS-485 control wires as the control signals are transfered down the coax (only on channel 1)

DVR Specifications:	
Video compression	H.264
Video format	NTSC/PAL
Input/Output	4-ch input/ 1-ch output
Display resolution	NTSC: 704 x 480 / PAL: 704 x 576
Recording resolution	NTSC CIF 352 x 240 / HD1 704 x 240 / D1 704 x 480
	PAL CIF 352 x 299 / HD1 704 x 288 / D1 704 x 576
Recording modes	Constant, Scheduled or Motion Triggered
PTZ Control	Built-in RS-485 / support PELCO-P and PELCO-D
Dimensions	375(L) x 265(W) x 60(H)mm
Camera Specifications	
Resolution	350 TV Lines
Effective range	10mUp to 10m
Lens	3.6mm
Minimum illumination	0.1Lux/0Lux (with infrared on)
Mains power supply	Included
Image sensor	1/3" CCD
IR Illumination	21 LEDs
Dimensions	90(D) x 60(Dia)mm

	Human Detection Camera				
480	View live or footage or phone/iPh 3G phone not	n a 3G			
	Human Detection Can	nera Specifications			
	Image sensor	1/3" HR colour CCD			
	Resolution	480 TV Lines			
	Effective range	up to 15 metres			
	Lens	3.6mm			
	Minimum illumination	0.17Lux/0Lux (with infrared on)			
	PIR detection range	40° angle with 5m distance			
	IR Illumination	12 LEDs			
	Dimensions	90(W) x 145(D) x 30(H)mm			

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7	Cat.	Qty 1+	Qty 2+	Qty 4+		A THE
	QV-8110	\$799.00	\$719.00	\$679.00	LIEHR) WARRATTU	PRICE

SURVEILLANCE NETWORK ACCESS

Enabling network access to a video surveillance device gives additional flexibility to how you view your cameras and the ability to monitor surveillance activities any distance away from the recorder or camera. Activating this access requires configuration of the device, the remote PC or smart phone, and the network connection between the two points.

Local connections (within a LAN) are quite straight forward and are generally explained in the user guide for the surveillance device. Most local connections will require settings to be configured on the surveillance device and software on the PC or smart phone.

Freecall order hotline: 1800 022 888

Remote connections (from off-site) are harder to configure and require a broadband connection at the local and remote sites. As the viewing connection to the surveillance site will be as initiated from off-site the firewall within the on-site modem will need to be configured to accept remote access. The method used is referred to as Port Forwarding and the configuration is dependent on the brand of modem as well as your internet provider (ISP). For more information on this we recommend you check the details for your modem online. Many websites are available offering instructions on how to configure modems from most manufacturers.

Digital Video Recorders - Pro

PROFESSIONAL DIGITAL VIDEO RECORDERS

Compact Full Feature Digital Video Recorders

Ideal for small surveillance installations with 4 cameras or less, this digital video recorder is small enough to be economical yet delivers image quality and features normally found on high level models. Incorporating standard functions such as a 4 channel multiplexer, Ethernet functions, and H.264 video compression, it also delivers D1 recording resolution video (704 x 576) at 100 frames per second. An embedded Linux OS handles system management and enables simultaneous viewing, playback, recording and backup operations Playback can be displayed locally through the composite or VGA outputs and remotely via a network connection using a web browser or an iPhone®, iPad®, or Smartphone app*. The unit features 4 composite video inputs, composite video output, VGA monitor output, event triggered recording (motion, camera activation, or alarm), video loss detection, remote network control or view, and USB back-up support. Supplied with a 500GB HDD fitted, software and manual on CD, power supply, and guick start guide



* DMSS remote access app available for iOS®, Android™, BlackBerry®, Symbian®, and Windows Mobile® operating systems.

- H.264 compression for recording and web transmission
 Variable recording resolution and frame rate
 Local and remote controlling for PTZ cameras

- Built-in web server for network access
 Height equal to 1U rack mounting
- · USB support for flash drive, portable HDD, and
- portable CD or DVD recorder

 Pentaplex operation for simultaneous recording, live view, playback, backup, and remote access



Specifications	QV-8120		QV-8122		
Video input:	4 channel BNC composite		16 channel BNC composite		
Video output:	BNC composite, VGA		HDMI, BNC compo	site, VGA	
Audio input:	4 channel		4 channel		
Audio output:	1 channel		1 channel		
Alarm inputs:	4		16		000000
Alarm relay outputs:	1		3		
Alarm relay rating	1A 30V max N.O. contact		1A 30V max N.O. o		A CONTRACTOR OF THE PARTY OF TH
Maximum recording resolution:	704 x 576 (D1) at 25 IPS p	er channel	704 x 576 (D1) at 2	25 IPS per channel	
		400 IPS		INCLUDED	
Hard disk storage:			500GB SATA		
Hard disk support	1 SATA port		2 sata PORTS		500GB HDD
Processor	Single Core		Dual Core		
Network Connection:			Gigabit Ethernet vi		
		Local via USB and remote back-up via network			
		12VDC 3.3A (included)			
		15W		LEFR	
Dimensions: 375(W) x 285(D) x 45(H)mm		375(W) x 285(D) x	45(H)mm	WARRENTY	
7	Cat.	Qty 1+	Qty 2+	Qty 4+	
4 Channel Composite	QV-8120	\$399.00	\$359.00	\$339.00	
16 Channel BNC Composite QV-8122 \$899.00		\$809.00	\$765.00		

Professional Hybrid Digital Video Recorder (DVR) - 16 Analogue + 16IP Channels

Capable of simultaneously recording video from a whopping 32 cameras, this DVR system will suit the most complex of surveillance applications. With 16 analogue system will suit the most complex of surveillance applications. With 16 analogue camera inputs and an additional 16 IP camera inputs it can handle all your video surveillance requirements in a single system. Powered by a dual core CPU running an embedded Linux OS it has enough power to support recording and playback of video from all channels at D1 resolution (704 x 576) and display all 32 cameras on one screen using advanced multiplexing functions. Along with all the advanced features it also includes HDMI and composite video outputs, VGA monitor output, multiple recording modes, video loss detection, remote network access, and LISB backup. recording modes, video loss detection, remote network access, and USB back-up support. Live video and playback can be displayed locally through multiple video outputs and accessed remotely via a network connection using a web browser or an iPhone®, iPad®, or Smartphone app*.

Features

- H.264 compression for recording and web transmission
- Variable recording resolution and frame rate
 Manual, timer, and event recording modes
- · Event log and/or recording from motion detection, alarm trigger, and camera activation
- Local and remote controlling for PTZ cameras
- Built-in web server for network access

- Dimensions equal to 2U rack mounting
- USB support for flash drive, portable HDD, and portable CD or DVD recorder Pentaplex operation for simultaneous recording, live view, playback,
- backup, and remote access
- Supports IP cameras manufactured by Arecont Vision, AXIS, Canon, Dahua, Dynacolor, Onvif, Panasonic, Samsung, Sanyo, and Sony



Video is stored on the included 1TB HDD which can be supplemented by additional SATA drives to a total of 6 drives, or 8 with the removal of the DVD burner. Each port is capable of supporting a 3TB drive allowing the internal storage to be upgraded to a massive 24TB. Local backing up of recorded surveillance is handled through a built-in burner for transfer to DVD and multiple USB ports for transfer to a flash drive or portable HDD. For larger volumes of data there is also an eSATA port for high speed transfer to portable hard drives. Remote transfer options are also covered with a Gigabit Ethernet connection enabling remote control and transfer of recorded video to a local or remote computer system. Supplied with a 1TB HDD fitted, software and manual on CD, and quick start guide.

* DMSS remote access app available for iOS®, Android(TM), BlackBerry®, Symbian®, and Windows Mobile® operating systems. See our website for more information

Specifications:		
Analogue video inputs	16 channels BNC composite	
Digital video inputs	16 channels from IP sources at D1 resolution	
Video outputs	HDMI, BNC composite, VGA	
Audio inputs	16 channel	
Audio output	1 channel	
Alarm inputs	16	
Alarm relay outputs	6	
Alarm relay rating	1A 30V max N.O. contact	
Analogue input recording		
Maximum resolution	704 x 576 (D1) at 25 IPS per channel	
Maximum frame rate	400 IPS	
Digital input recording		
Maximum resolution	704 x 576 (D1) with 16 cameras at 25 IPS per channel	
	1080p with 4 cameras at 25 IPS per channel	
Maximum frame rate	400 IPS at D1 resolution	
	120 IPS at 1080p	
Hard disk storage	1TB SATA included	
Hard disk support	8 SATA ports for maximum of 8 HDD (6 HDD with DVD drive fitted)	
Network Connection	Gigabit Ethernet via RJ45	
Back-up	Locally via USB or eSATA and remotely via network	
Power supply	100-240VAC	
Power consumption	40W (not including HDD)	
Dimensions	460(D) x 440(W) x 89(H)mm	







7" TFT LCD Widescreen Colour Monitor with IR Remote

It will deliver high resolution pictures in widescreen format and clear sound reproduction through its inbuilt speaker. It is extremely lightweight and is suitable for all sorts of mobile and fixed monitoring applications. Suitable for in-car and home entertainment, use it to watch DVDs, PS2®, XBOX®, etc. Two RCA composite video inputs and one audio input are provided for a multi source system. This is truly a versatile monitor, it has low power consumption, wide viewing angle, and is NTSC and PAL compatible. It is equipped with On Screen Display enabling the user to easily

Cat

OM-3752

control the colour, contrast, hue, brightness, and volume. A very slim and small infrared remote control is included. It has reverse image capability adjustable by pressing a button. Unit comes with an adjustable swivel bracket with double sided tape for adhesion on clean flat surfaces. A 4 pin mini din to 2 RCA and power cable is also supplied



Specifications	
System	NTSC/PAL
Power input	12VDC
Power consumption	10W
Video input	Composite video signal
video iliput	1Vpp 75 Ohm
Audio input	10dB (10k Ohm)
Operating temperature	-10°C to + 40°C
Screen size	7" (diagonal width)
Display method	TFT Active matrix system
Resolution	1140(H) x 234(V)
Weight	800a

*Works with most, but not all widescreen sources. Will default to

modified widescreen in some cases.



9" LCD Colour Monitor

Featuring multisource inputs and reverse image function, it also doubles as a reversing camera monitor. Adjust the volume, colour, contrast, brightness and select your AV input with the front panel controls or simply use the slimline remote control. The tilting bracket gives you several in-car options, including dash and headrest mounting. NTSC/PAL system

9" widescreen - 4:3 & 16:9 switchable format
800 x 480 display resolution

Qty 1+

\$119.00

· Dual video and single audio input leads

Front panel AV input and audio output
12VDC power input, 12W power consumption

· Includes mounting bracket and remote control

This 9" widescreen LCD delivers crisp high

Qty 4+

\$94.95





remote



QM-3761

Qty 1+ \$129.00

\$115.95

Qty 2+

\$106.95

Qty 4+ \$102.95



19" LCD Security Monitor

A must have addition to your arsenal of visual deterrents to clearly demonstrate to potential thieves that they are being watched, and unlike a generic LCD screen this is fitted with a hardened front bezel capable of withstanding a massive impact. The unit features BNC/VGA/HDMI inputs for easy connection to your DVR or in store media player and can comfortably sit on a desk or be mounted to a standard 100mm VESA bracket.

Specifications	
Resolution	1280 x 1024
Contrast ratio	800:1
Interface	
Video in/out	BNC x 2 / BNC x 1
Audio in/out	3.5mm x 1
	3.5mm x 1
	S-video in
	HDMI in
	VGA in
Dimensions	455(W) x 360(H) x 60(D)mm





SURVEILLAND

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OM-3576

Qty 1+ \$469.00

MINI SURVEILLANCE CAMERAS

Mini CCTV 420TV Lines Cameras

Quality Sharp colour CCD cameras, ideal for use in retail stores, home security, remote monitoring or covert applications. Both feature adjustable focus lens and composite video output which can feed into the AV inputs on any DVR or TV. Requires a 12VDC regulated power supply. Three models to choose from with options of pinhole lens or IR illumination. SHARI SENSOR INSIDE

MINI COLOUR CCD CAMERA Cat OC-3690

Specifications	
Sensor	1/3"
Sensor brand	Sharp
Resolution	420 TV Lines
Power required	12VDC
Video output	1Vpp, 75 ohm
Min. Illumination	0.8Lux @ f1.2
Lens	3.6mm
Dimensions	36(W) x 36(H) x 15.9(D)mm

MINI COLOUR PINHOLE CAMERA

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Specifications	
Sensor	1/3"
Sensor brand	Sharp
Resolution	420 TV Lines
Power required	12VDC
Video output	1Vpp, 75 ohm
Min. Illumination	0.8Lux @ f1.2
Lens	3.7mm(pinhole lens)
Dimensions	36(W) x 36(H) x 15.9(D)mm

7			Cat.	Qty 1+	Qty 2+	Qty 4+
	Colour CCD	420TVL	QC-3690	\$49.95	\$44.90	\$42.45
	Colour Pinhole	420TVL	OC-3692	\$49.95	\$44.90	\$42.45

PINHOLE LENS SURVEILLANCE CAMERAS

A pinhole lens provides a general, wide view, and generally requires only a 1mm viewing hole, which is ideal for covert or unobtrusive surveillance. Mount one near the front door to check on visitors, in the baby's room to keep an eye on a sleeping child, or near a window to watch over the backyard swimming pool. The cameras have a composite video output so they can be connected directly to a VCR or the AV input of a normal TV.

Colour CMOS Pinhole Camera in Mini Case - Audio

- Built in Audio Electret microphone
- Operates between 6 to 12 volts
 Includes 200mm lead with 2.1mm DC socket,
- RCA audio socket and RCA video socket

Specifications:	
Туре	Colour
Sensor	1/4" CMOS
Sensor brand	Omnivision
Sensor resolution (HxV pixels)	628 x 582
Resolution (Horizontal TVL)	380
Min illumination (lux)	2
Current draw	30mA
Dimensions (mm)	20 x 20 x 19
Recommended power supply	MP-3011



CMOS Colour



\$35.90

\$33.90

\$39.95

CAMERA POWER SUPPLY

CCD Camera Power Supply

12VDC 500mA regulated plugpack ideal for CCD cameras.

Terminates to a 2.1mm ID / 5.5mm OD DC plug, centre positive.

7	Cat.	Qty 1+	Qty 5+	Qty 10+
	MP-3011	\$19.95	\$17.70	\$15.70

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Cameras – Dome Pro

PRO DOME CAMERAS

3-Axis Colour Dome Cameras

3-axis mechanism provides easy installation and enables you to put the camera's field of view exactly where you need it. Quality Sony sensors and optics. Models include high resolution 550TVL, economical 380TVL and also a dummy version constructed using genuine components (housing, lens, etc.) which is indistinguishable from the real thing once installed.



3-AXIS DOME CAMERA 550TV LINES

Specifications	
Sensor	1/3"
Sensor brand	Sony Ex View HAD II
Sensor resolution (H x V pixels)	752 x 582
Resolution (horizontal TV lines)	650
Minimum illumination	0.01 lux
Lens	3.6mm
Current draw	9.5mA
Dimensions (mm)	110(Dia) x 85(H)
Recommended power supply	MP-3011



7	Cat.	Qty 1+	Qty 2+	Qty 4+
380TVL	QC-8616	\$99.00	\$88.95	\$83.95
650TVL	QC-8617	\$199.00	\$178.95	\$168.95

Colour Armour Dome (Vandal-Resistant) Camera

An extremely robust camera for use where vandalism is likely at a breakthrough price. The dome of this camera is made of reinforced polycarbonate and is designed to withstand a 300kg impact without cracking. The base is made of solid diecast aluminum.

Specifications:	
Sensor	1/4"
Sensor brand	Sharp®
Sensor resolution (HxV pixels)	512x582
Resolution (Horizontal TVL)	350
Min illumination (lux)	1
Current draw	110mA
Weight (grams)	-
Dimensions (mm)	92(Dia) x 70(H)
Recommended power supply	MP-3011





7	Cat.	Qty 1+	Qty 2+	Qty 4+
350TVL	QC-3293	\$149.00	\$133.95	\$126.95

3-Axis Vari-Focal Colour Dome Cameras with IR

High quality varifocal dome cameras with 3D gimbal mount enabling the camera to be mounted in almost any direction on a roof or wall. These cameras also feature 20m infrared illumination and varifocal autoiris lenses with ICR.

3-AXIS VARI-FOCAL DOME CAMERA WITH IR 380TV LINES Cat. OC-8618

3-AXIS DOME CAMERA WITH IR 550TV LINES Cat. QC-8619



Specifications	QC-8618	QC-8619
Sensor	1/4"	1/3"
Sensor brand	Sony SuperHAD	Sony Ex-View HAD II
Sensor resolution (H x V pixels)	500 x 582	976 x 582
Resolution (horizontal TV lines)		650
Minimum illumination	0.1 lux (IR off) / 0 lux (IR on)	0.01 lux (IR off) / 0 lux (IR on)
Lens	2.8-10.5mm with ICR	2.8-10.5mm with ICR
Power requirements	12VDC	12VDC
Current draw	375mA	370mA
Dimensions (mm)	110(Dia) x 85(H)	110(Dia) x 85(H)
Recommended power supply	MP-3486	MP-3486

7	Cat.	Qty 1+	Qty 2+	Qty 4+
380TVL	QC-8618	\$189.00	\$169.95	\$160.95
650TVL	QC-8619	\$269.00	\$245.00	\$229.00

Network Connect Vandal Proof Mini Dome Camera

Access your CCTV system via the Internet or your local intranet. Connect a few of these dome cameras to your switch and you can be up and running in a matter of minutes. They are designed to take advantage of power over Ethernet to reduce installation costs and setup hassles. You can access the camera through a web browser by hitting in the IP address. A small toggleable control panel pops out so you can move the camera around 3-axis, adjust the visual quality (brightness, contrast, colour), zoom. Snapshots can be taken with ease and the scheduled recording recording feature will capture mov files in H.264 format for reviewing later.

- Progressive scan CMOSInternal microphone
- Supports PoE power supply
- Support dual streams, and the sub stream used for the mobile phone surveillance Impact Protection: IEC60068-2-75 test, Eh, 50J; EN50102, exceeding IK10

- Compression H.264/MPEG4/JPEG
 3-axis adjustment, and high reliability
 Adopt advanced video compression with high compression ratio
- Supports ePTZ function

Specifications	
Sensor	1/4 inch CMOS
Resolution	640 (H) x 40 (V)
Min. illumination colour	0.1 Lux @ F1.2
Min. illumination B/W	0.01Lux @ F1.2
Electronic shutter	1/25s - 1/100,000s
Lens	4mm, F1.2 fixed iris
Angle of view	71°
Dimensions (mm)	99(W) x 97(L) x 45(H)





7		Cat.	Qty 1+
	Mini Dome Camera - VGA	QC-8624	\$199.00

Network Connect Vandal Proof Mini Dome Camera 2MP - 1080p

Access your CCTV system via the Internet or your local intranet. Connect a few of these dome cameras to your Ethernet switch and you can be up and running in a matter of minutes. It is designed to take advantage of power over Ethernet to reduce installation costs and setup hassles. You can access the camera through a web browser by entering in the IP address. A small toggle able control panel pops out so you can move the camera around 3-axis, adjust the visual quality (brightness, contrast, colour, zoom). Snapshots can be taken with ease and the scheduled recording feature will capture move files in H.264 format for reviewing later.



- Processor: TI DaVinci Series DSP
- Operating System: Embedded Linux
 Power supply: 12VDC, PoE
- Power consumption: < 4W
 Dimensions: 110(Dia) x 54(H)mm

Network

- Ethernet: RJ-45 (10/100Base-T)
- Network functions: Ipv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, UDP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP, IP Filter, QoS,
- Remote Operation: Monitor, playback, system setting, file download, log information, maintenance



Auxiliary interface:

MicroSD Card: Max 32GB local storage

Camera Specifications	
Image sensor	1/3" 2.0 Megapixel SONY progressive scan Exmor CMOS
Effective shutter	Auto/manual, 1-3 1/10000s
Min Illumination	0.2LUX/F1.6(Color),0.01LUX/F1.6(B/W)
Signal noise ratio	>50dB
Gain control	Auto/manual
White balance	Auto/manual
Lens mount	M12

Video Specifications	
Video compression	H.264/MJPEG
Image resolution	1080P (1920 x 1080), 720P(1280x720) / D1 (704x576) / CIF (352x288)
Encoding speed	1080p/720p (1-25fps) + D1(1-25fps)
Bit rate	160k-8Mbps
Snapshot:	1fps JPEG capture



7	Cat.	Qty 1+	Qty 2+	Qty 4+
	OC-8626	\$299.00	\$269.00	\$255.00

protected by a polycarbonate dome, this is the ideal camera for areas where vandals might want to not be on candid camera. The 24-LED IR illuminator ensures you'll catch them in the act even in total darkness.



Autoiris

Specifications	/
Sensor	1/3"
Sensor brand	Sony Ex-View HAD II
Sensor resolution (H x V pixels)	976 x 582
Resolution (Horizontal TV lines)	650
Min illumination	0.01 lux (IR off) / 0 lux (IR on)
Lens	3.7-12mm with ICR
Power requirements	12VDC +/- 10%
Current draw	390mA (IR on)
I/R Range	Up to 20 metres
Dimensions (mm)	145(Dia) x 110(H)
Recommended power supply	MP-3486





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7	Cat.	Qty 1+	Qty 2+	Qty 4
650TVL	QC-8620	\$349.00	\$315.00	\$299.

DOME CAMERA KITS

Colour Camera Kit with 2 Wire Connection

A simple 2 wire combined arrangement for power and video make this system a snap to install. The system uses a CMOS image sensor with 360 TV line resolution. The main unit will automatically sense signal cable tampering or incorrect wiring and alert you with

a warning signal. Kit includes camera, system unit, 25m of connecting cable, and mains adaptor.

CMOS sensor • 360 TV lines

SURVEILLAN

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SECURITY

7	Cat.	Qty 1+
Colour Dome Kit	QC-3264	\$69.00

OUTDOOR SURVEILLANCE CAMERAS

CMOS Outdoor Camera with IR

Versatile CMOS outdoor camera with IR illuminator. Supplied with an 18m power/video cable, it could be used stand-alone, or as an additional camera for a DVR.

- Day/night operation 180mm adaptor cable -DIN to BNC and DC plug
- 18m Power/video cable
- 12VDC Power supply included

Specifications	
Resolution	350TV lines
Lens	6.0mm
Power requirements	12VDC 300mA
Dimensions	85(L) x 58(Dia)mm



420TVL IP68 CCD Security Camera

Features a high quality SONY® HAD II CCD image sensor and a raft of other additions including IP68 weatherproofing, IR LEDs for night vision at up to 30m, dual window structure to prevent reflection and diffusion of IR light etc. The built-in automatic light-source control will ensure the infrared illuminator is activated when the environmental luminous intensity drops. This unit is supplied with sun hood and mounting bracket/hardware

SONY

Otv 4+

\$88.95

\$99.00

Freecall order hotline: 1800 022 888

Qty 10+

\$78.95

• Includes 18m cable and 400mA power supply



OC-8630

IP68 3-Axis Cameras with Concealed Cable Bracket

High quality IP68 rated cameras with 3-axis movement through a wide range. The power and video cables exit through the base, so are completely concealed from prying cutters. The camera bodies themselves are very compact so will fit unobtrusively into your surveillance setup. They're also equipped with IR LEDs so will work in darkness at up to 20 metres range.

Two models:

SONY

SENSOR INSIDE

3-AXIS OUTDOOR IR CAMERA 380TVL Cat. OC-8611

3-AXIS OUTDOOR IR CAMERAS 550TVL Cat. OC-8612



Specifications	QC-8611	QC-8612
Sensor	1/4"	Sony 1/3"
Sensor brand	Sony SuperHAD	Sony Ex-View HAD II
Sensor resolution (H x V pixels)	510 x 492	976 x 582
Resolution (horizontal TV lines)	380	650
Minimum illumination (lux)	0.1 (IR off) / 0 (IR on)	0.01 (IR off) / 0 (IR on)
Lens	6.0mm	6.0mm
Power requirements	12VDC	12VDC
Current draw	315mA	340mA
Dimensions (mm)	70(L) x 53(W) x 78(H)	70(L) x 53(W) x 78(H)
Recommended Power Supply	MP-3011	MP-3011

7	Cat.	Qty 1+	Qty 2+	Qty 4+
380TVL	QC-8611	\$129.00	\$115.95	\$109.95
650TVL	QC-8612	\$249.00	\$225.00	\$215.00

40m Vari-Focal Pro IR Camera

A quality camera with a number of unique features that make it ideal for long range outdoor surveillance. It's housed in a robust aluminium case that provides excellent cooling performance while maintaining the integrity of the IP68 rating. The Sony SuperHAD sensor and the camera's 42 infrared LEDs enable the system to capture images up to 40 metres away in total darkness. The IR LEDs can be switched from low, medium or high illumination for different distances. The camera is supplied with sun hood, mounting bracket and hardware.

- · Auto iris
- Flickerless
- ICR
- 2 Stage Auto gain control
- Back light compensation

Specifications	
Sensor	1/3"
Sensor brand	Sony Ex-View HAD CCD II
Sensor resolution (H x V pixels)	976 x 582
Resolution (Horizontal TV lines)	650
Minimum illumination	0.01 lux (IR off), 0 lux (IR on)
Lens	9.0-22.0mm/F2.0 Autoiris with ICR
IR range	40m
Power requirements	12VDC
Current draw	750mA max
Recommended power supply	MP-3486



7	Cat.	Qty 1+	Qty 2+	Qty 4+
650TVL	QC-8613	\$399.00	\$359.00	\$339.00

SPECIAL APPLICATION CAMERAS

Bullet Style Camera - IP67

Housed in a rugged, black anodised aluminium case, this quality camera is weather resistant for mounting outside, under eaves, for pool, driveway, or pathway monitoring. It is supplied with a quality, swivel mount base, and mounting screws. Requires a 12VDC power supply. Use our MP-3011, 12V, 300mA plugpack.

 Supply Lead: 300mm, 2.1mm DC socket. BNC socket for video.

Specifications:	QC-3488
Type	Colour
Sensor	1/3"
Sensor brand	Sony® SuperHAD
Sensor resolution (HxV pixels)	500x582
Resolution (Horizontal TVL)	380
Minimum illumination (lux)	1
Current draw	80mA
Weight (grams)	400gms
Dimensions (mm)	26(Dia) x 87
Recommended Power Supply	MP-3011





WATER RESISTANT Rated to IP67



Cat. Qty 2+ \$119.00 \$106.95 \$100.95 Colour (Sony Sensor) 380TVL QC-3488

SENSOR INSIDE

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PROFESSIONAL SURVEILLANCE CAMERAS - CCD

Professional 650TVL Dual Voltage Effio-E CCD Camera

A high quality professional 650TVL security camera which utilises Sony®1 new Effio-E technology. It allows for high resolution images with excellent rew Enro-E technology. It allows for high resolution images with excellence colour reproduction, very high sensitivity and S/N ratio so images don't appear grainy. It also provides adjustable privacy masking for blocking out certain parts of the picture and motion detection for extra security. A myriad of video functions are included.



SONY

SENSOR INSIDE

SENSOR INSIDE

Motion detection: 4 free areas (area size adjustable)

Privacy masking: 8 areas (area size adjustable)
 White balance: ATW / Manual / Push / ANTI CR / User1 / User2/ Push lock

Back light compensation: On / Off Digital noise reduction: On / Off

Adaptive Tone Reproduction (ATR): On / Off

IR Optimiser function: On / Off
 Freeze image: NTSC: 1/100, PAL: 1/120

Onscreen display for setup: Yes

Cat OC-8628



Professional 650TVL Dual Voltage Wide Dynamic Range CCD Camera

Utilises a highly sensitive colour Sony® 1/3" interline transfer CCD producing 650 lines of horizontal resolution. The super wide dynamic range technology is capable of capturing both high and low luminance subjects under varying conditions. Low-light performance can be improved with the digital slow shutter feature which reduces the image refresh rate and increases the camera sensitivity. Motion detection is also included for more comprehensive monitoring. An alert is issued when movement is detected. The camera can be remotely controlled through an RS-485/422 interface and can be powered either from a 12VDC or 24VAC power source.

Privacy masking; 15 areas (area size adjustable)
 White balance: Auto / Indoor / Outdoor / Manual / Push auto

· Back light compensation: On/Off

Digital zoom: 16x

Digital noise reduction: Low / Mid / High

Mirror image: Horizontal / Vertical / Rotate

• Freeze image: On/Off

 Remote control: RS-485/422 Onscreen display for setup

Cat. OC-8629



Specifications	QC-8628	QC-8629
Sensor	1/3" Colour Sony® ExView HAD II CCD	1/3" Colour Sony® Super HAD II Double Density WD CCD
Sensor resolution (H x V pixels)	NTSC: 976x494, PAL: 976x582	NTSC 976x494, PAL 976x582
Resolution (Horizontal TVL)	650TVL	650TVL
Minimum illumination (lux)	0.01 Lux @ F1.2 colour mode	0.01 Lux (Day), 0.003 Lux (Night, 0.0003 Lux (DSS)/F1.2
Iris control	Auto / Manual	Auto/Manual
S/N Ratio	More than 50dB	
Gamma	0.45	0.45
Lens mount	C/CS	C/CS
Power requirements	12VDC/24VAC / consumption: 110mA	12VDC/24VAC / consumption: 6.36W
Recommended power supply	MP-3011	MP-3011
Dimensions	115(L) x 50(W) x 43(H)mm	132(L) x 64(W) x 51(H)mm

7	Cat.	Qty 1+	Qty 2+	Qty 4+	
650TVL	QC-8628	\$199.00	\$178.95	\$168.95	
650TVL	OC-8629	\$299.00	\$269.00	\$255.00	

High Resolution Day / Night Colour CCD - Pro Style

High Resolution Day/night camera with Sony® sensor, colour by day, black and white by night.

· Perfect for use with infra red illuminators.

- High Resolution Sony® SuperHAD CCD Sensor.
- · Extremely high performance in low light levels
- Flickerless
- Auto Iris Control
- Automatic White Balance Back Light Compensation
- 3 Stage Automatic Gain Control
 High Speed Electronic Shutter





High Resolution ExView Colour CCD - Pro Style

High Resolution ExView HAD CCD-equipped camera to dramatically improve low-light performance. SONY

Perfect for use with infra red illuminators

High Resolution Sony® ExView HAD CCD Sensor.
 Extremely high performance in low light levels

OSD

Mechanical ICR

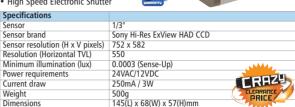
Dimensions

FlickerlessAuto Iris Control

Automatic White Balance
Back Light Compensation

3 Stage Automatic Gain Control

· High Speed Electronic Shutter



7	Cat.	Qty 1+
550TVL	QC-8622	\$199.00

Pro 550TVL Dual Voltage CCD Camera

Professional grade wide dynamic range camera based around Sony®'s SS2 vertical double-density wide dynamic range CCD system. It provides a high quality picture in conditions which would render most other cameras' output useless.

SONY SENSOR INSIDE

Works on 12VDC or 24VAC

Low smear / High anti-blooming
High signal to noise ratio

Recommended Power Supply



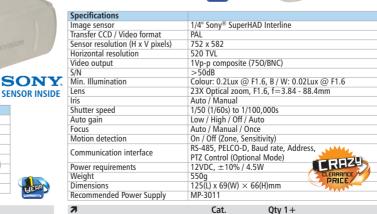
Qty 1+
13 \$199.00
23

Colour 520TV Lines 23x **Zoom Hikvision Camera**

Professional camera capable of 23x zoom. It utilises the Sony® SuperHad 1/4" sensor for 520 TV line resolution.







OC-3508



520TVL

SENSOR INSIDE

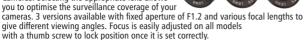
\$349.00

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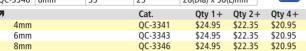
PRO CAMERA LENSES

CS Mount CCTV Lenses for Professional Surveillance Cameras

Series of CS mount CCTV lenses designed to match our range of HIKVISION professional CCD Cameras. Selecting the appropriate lens allows



Cat.	Focal Length	1/3" Sensor	1/4" Sensor	Dimensions
QC-3341	4mm	59	44	28(Dia) x 27.3(L)mm
QC-3343	6mm	43	32	28(Dia) x 30(L)mm
QC-3346	8mm	33	25	28(Dia) x 30(L)mm



Vari-focal Lenses for Day / Night Cameras

These high grade Korean lens are constructed from ED (extra-low dispersion) glass elements for greatly enhanced low light performance and improved picture quality. Especially suited to our professional type ExView and day / night cameras! Our QC-3353 also includes aspherical elements to further reduce optical aberrations and provide the best possible picture.



4.0-16.0MM VARIFOCAL AUTOIRIS LENS Cat. QC-3355

5.0-50.0MM VARIFOCAL AUTOIRIS LENS Cat. QC-3356

			_
Specifications	QC-3353	QC-3355	QC-3356 Aspherical
Focal Length(mm)		4.0 - 16.0	5.0 - 50.0
Iris Type	direct drive	direct drive	direct drive
Aperture	F1.0-360	F1.4-360	F1.4-360
Format	1/3"	1/3"	1/3"
Viewing Angle	44.1° - 118.7° diagonal	75.9° - 22.9° diagonal	66.5° - 7.4° diagonal
Weight:	53.0g	60.0g	120.0g
Dimensions (mm)	33(dia) x 50(L)	34(dia) x 61(L)	44(dia) x 70(L)
Mounting:	CS	CS	CS

7		Cat.	Qty 1+	Qty 2+	Qty 4+
	Aspherical 3.0-8.0mm	QC-3353	\$129.00	\$115.95	\$109.95
	4.0-16.0mm	QC-3355	\$99.00	\$88.95	\$83.95
	5.0-50.0mm	QC-3356	\$129.00	\$115.95	\$109.95

LENS GLOSSARY

SURVEILLAN

FLIRITY E

ED (EXTRA-LOW DISPERSION) GLASS

ED glass helps to minimise chromatic aberrations often seen when strong IR and near-IR light is present (e.g. from high powered IR illuminators) whilst also reducing the focal deviation between the visible and near-IR spectrums making it perfect for day / night use. ASPHERICAL LENSES

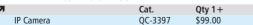
Aspherical lenses all but eliminate spherical aberrations caused by strong light sources situated just out of the field of view (e.g. bright sunlight, fluorescent lighting and IR illuminators).

IP/NETWORKING

Plug & Play MPEG-4 IP Cameras

Unlike other IP Internet cameras on the market you don't need to worry about DDNS settings and NAT IP mapping. Not only is it easy to install, it features high resolution 640×480 pixels, has built in microphone for audio monitoring, and allows you to control up to 16 cameras through the software included. With easy access to the camera via the web service, all you need to do is plug it in and play! So simple!

- No more DDNS setting or IP mapping
 Easy access to the camera via the Internet
- Software to manage 16 IP Cameras
- Built-in web server
- Support enhanced MPEG-4 compression
- Fmail notification for motion detection
- Upload image to FTP
- 3G cell phone viewing
 Synchronized audio monitoring
- Unicast to 4 users simultaneously · Multicast up to unlimited users simultaneously
- Watchdog function
- Supported operating systems: Windows
 Dimensions: 125(L) x 75(W) x 35(H)mm



Freecall order hotline: 1800 022 888

Wi-Fi Remote Wireless IP Camera

The smallest IP camera we've ever seen! With its wireless network interface, the it allows you to stream and record audio video images over your network or directly to your Smartphone (iPhone® or Android device) and laptop on the go. Powered by a CR2 battery and coupled with an incredibly compact design means you can easily carry the it around and even put it on your keychain! The Ai-Ball is supported by various mobile and PC applications that enhance and expand your experience

(including some iPhone® apps not included). Stream or record your videos from a remote location even when you are far away from the IP camera (even while overseas) using its infrastructure WAN mode.

Recommended upgrade: QC-3369 Cradle and adapters. QC-3369 is supplied with a mains power supply and cigarette plug so you don't have to use CR2 batteries, and is also supplied with a stand for the camera.

Camera Specification	
VGA	640 x 480, QVGA 320 x 240,
VGA	QQVGA 160x120, up to 30fps
F2.8	
View Angle	60°
Focusing	200mm to Infinity
Video Recorder	Motion JPEG
Typical bit rate	
(VGA)	standard (2500 kbps), high (1600 kbps)
(QVGA)	standard (1100 kbps), high (800 kbps)
(QQVGA)	standard (600 kbps), high (400 kbps)
Video Snapshot	JPEG
Wireless Interface	IEEE 802.11b/g 2.4GHz ISM Band
Wireless Security	WEP 64/128, WPA, WPA2
Wireless Range	Infrastructure: 20m (Typical), Adhoc: 7.5m (Typical)
Wireless performance*	
	54Mbps, max. connection rate, Adhoc: 11Mbps,
Infrastructure	max. Connection rate (Note: Wireless performance
	varies with distance and access point usage.)
Antenna	Single, internal
Dimension	Weight 30mm(Diameter) x 35mm(L) / 100g
Power Supply / Consumption	
Battery operated	
Voltage	3.0V
Power	750mAH (CR2)
Current consumption:	320mA (typical); 350mA (maximum)

CRADLE + ADAPTORS TO SUIT QC-3368

A practical and handy stand for this wireless WI-FI IP camera (QC-3368) which is supplied with a USB cable, a cigarette adapter, and mains adapter. These accessories enable your camera to be powered from a multitude of sources. A versatile cradle and power system designed for this camera.

Includes: Bracket for QC-3368 USB mini B plug to A plug cable Cigarette to USB power supply Mains to USB power supply

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Dimensions of bracket: 75(H) x 55(W) x 55(D)mm







7	Cat.	Qty 1+	Qty 2+	Qty 4+
Camera	QC-3368	\$99.95	\$89.95	\$84.95
Cradle & Adaptor	QC-3369	\$29.95	\$26.90	\$25.45

Wireless IP Camera - 1.3MP

An affordable remote security solution, enabling you to keep an eye on the safety of your pets, property, or loved ones. View live camera footage on your iPhone® or computer from anywhere there is Internet access. Free management software for PC, iPhone® and Android phones, view up to 16 network cameras simultaneously via the PC software. Easy to install and features high resolution 1280 x 960 pixels. Also incorporates motion triggered snapshots and pre/post-recording.

- Motion Detect record
- Sends motion detected snapshots
- to email and FTP
- · RJ45 Ethernet port
- 1.3MP sensor
- Power 5VDC 1A (Power supply included)
 802.11 b/a/n 150MBPS

- 002.11 b/g/11 150101b1 5				
Specifications				
Resolution	SXVGA (1280 x 960) at 30fps			
Min Light	1.3 lux			
View angle	75 degrees			
Compression	M-JPEG			
Recording format	AVI			
Dimensions	78(H) x 68(W) x 27(D)mm			





Cat. Otv 2+ Otv 4+ QC-3830 \$129.00 \$115.95

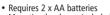
Dummy Cameras & Camera Housings

DUMMY CAMERAS

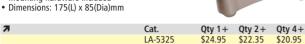
Dummy IR Camera

Visible deterrence is probably the most important aspect of security. Most criminals aren't completely stupid - if your premises looks like it has CCTV surveillance, they'll move on to

the place that doesn't. These dummy cameras look totally convincing -they have genuine-looking IR LEDs and a real LED that adds to the illusion. Add a couple of warning signs and the baddies will never know the difference.



· Mounting hardware included



Dummy Dome Camera Kit with Flashing Sign

A simple and effective visual deterrent, this fake security kit comes with a realistic-looking dummy dome camera and a flashing solar-powered 80 x 80mm LCD warning sign. Great for home, office, schools or any location to discourage thieves.



· Battery: 3 x AA batteries



Dummy IR Camera Kit with Flashing Sign

If your premises looks like it has CCTV surveillance potential burglars may move on to the place that doesn't. This dummy IR camera kit comes with two dummy cameras and a flashing CCTV sign, the cameras have genuine looking IR LEDs and a real LED that adds to the illusion. The CCTV flashing sign is solar powered and can be changed to not flash by covering the solar panels on the side.

Included:

- 2 x Dummy IR cameras
- CCTV flashing sign
- 2 x CCTV stickers

Specifications

- Each camera requires 2 x AA batteries
- Mounting hardware included
 Camera Dimensions: 175(L) x 85(Dia)mm
- Flashing Sign Dimensions: 50(L) x 10(W) x 50(H)mm

7	Cat.	Qty 1+	Qty 2+	Qty 4+
	LA-5329	\$49.95	\$44.90	\$42.45

Dummy Speed Dome Camera

You don't have to spend thousands of dollars to secure your home or office. Visual deterrent is one of the most effective way of guarding your property. This realistic looking speed dome camera mounts on your walls or eaves. It has a blinking LED which adds more realism which is powered by 2 x AA batteries (not included)

Dimensions: 130mm (dia) x 252(H)mm



7	Cat.	Qty 1+	Qty 2+	Qty 4+
	LA-5330	\$24.95	\$22.35	\$20.95

CCTV Installation Guide

This guide explains the various pieces of equipment required, the options available for installation and the different methods of viewing and recording the images. Topics cover camera types, lenses, light levels, power supplies, camera positioning, switchers, monitors and recorders.

- 8 pagesA4





7	Cat.	Qty 1+
	BI-8206	\$2.00

CAMERA HOUSINGS

Professional Aluminium Internal / **External Camera Housings**

These weatherproof enclosures are ideal for adapting any camera, but particularly our Professional range of video cameras for commercial indoor or outdoor use. The enclosures feature solid aluminium construction to protect the camera and a clear glass window protected by an integral sunshade. For indoor use, the sunshade can be easily removed. Waterproof cable entry is achieved with screw down rubber seals, and captive nuts are supplied for mounting.

- Note: Price includes sunshade
- Does not suit cameras with IR LEDs on the front
- Use mounting bracket QC-3337 or QC-3387

 Measures 390(L) x 100(H) x 112(W)mm including sunshade QC-3330



IN-BUILT 24VAC HEATER

- · Features an internal heater to stop housing humidifying which causes clouding of viewing glass and lens.
- 410(L) x 118(H) x 107(W)mm including Sunshade QC-3331



7	Cat.	Qty 1+	Qty 2+	Qty 4+
Standard	QC-3330	\$34.95	\$31.45	\$29.90
In-built 24VAC Heater	QC-3331	\$49.95	\$44.90	\$42.45

DOME CAMERA HOUSINGS

Mini Size Dome Camera Housing

This dome camera housing looks exactly like the real thing, at a fraction of the price. Make your business/home/office look like its under surveillance. Even includes the metal camera case inside though with no lens.

- Can be used with OC-3474 and OC-3494
- Dimensions: 88(dia) x 68(H) mm

7	Cat.	Qty 1+	Qty 2+	Qty 4+
	LA-5317	\$9.95	\$8.75	\$8.25

Metal Dome Camera Housing - 'L' Type Bracket

This dome camera housing is made with a plastic bracket and a tough plastic dome. It is an "L" type camera housing and can be placed in any right-angled side edge.

- Dome measures approx 70(dia)mm
- Meant to mount high up on a wall
 Dimensions: 100(W) x 125(D) x 63(H)mm

7	Cat.	Qty 1+	Qty 2+	Qty 4+
	LA-5311	\$19.95	\$17.70	\$16.70

Heavy Duty Armour Dome Case

Designed to mount a standard board camera (up to 42mm squared). It's constructed with a strong die-cast aluminium base, and a reinforced polycarbonate dome. The dome can support more than 500kg of pressure before cracking, and can withstand a blow from a 4.5kg sledgehammer. Tamper proof Torx bits are used in the cover, and a large threaded side cable entry is used for security.



		-	
Specifications			
Maximum Dome Load	500kg		
Maximum Camera Size	42mm x 42mm board camera		
Dimensions	84(H) x 142(dia)mm		
Weight	450g		
7	Cat	Otv 1⊥	Otv '

7	Cat. QC-3328		Qty 2+ \$26.90	
	QC-3320	\$23.33	\$20.50	\$23.43

INFRARED SECURITY SPOTLIGHTS

18 LED IR Spotlight - 5 Metres

Use a surveillance camera in zero Lux conditions with the aid of this high-powered infrared spotlight. It has a waterproof metal case, and a built in Light Dependant Resistor (LDR) to automatically switch on when the light level is below acceptable levels. It has an effective range of around 5 metres. It is supplied with a metal mounting bracket & mounting screws.



Specifications	
Requires	12VDC @ 200mA
	44.5(Dia) x 27(D)mm
Recommended power supply	MP-3011



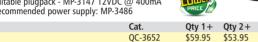
71	Cat.	Qty 1+	Qty 2+	Qty 4+
	QC-3650	\$34.95	\$31.45	\$29.90

56 LED Infrared Spotlight - 30 Metres

This long range infrared spotlight will enable an infrared or monochrome camera to operate in zero lux conditions. The beam has a range of 30 metres and will switch on automatically as darkness falls or ordinary lights are turned off. The spotlight is ideal for situation where unobtrusive surveillance is required in dark areas such as warehouses, factories, store rooms, forecourts, etc. Fitted with an adjustable mounting bracket and 450mm power lead terminated with a DC power connector.



- 30 metre range 56 high brightness IR LEDs
- · Automatic day/night operation
- Approx 75mm dia x 140mm long
 Suitable plugpack MP-3147 12VDC @ 400mA
- Recommended power supply: MP-3486





Qty 4+

\$50.95

CAMERA MOUNTS

Ceiling Grid Camera Mounting Bracket

Designed to mount in the ceiling grid of most office and corporate buildings. The bracket supports fittings to mount any of our Professional camera range.

- Bracket height is 70mm and includes a 30mm extension to extend the bracket height to 100mm
- Supplied in beige finish
- 1/4" mount

SURVEILLAN

SECURITY B









\$59.95

7	Cat.	Qty 1+	Qty 2+	Qty 4+
	QC-3333	\$9.95	\$8.75	\$8.25

Medium Professional Camera Mounting Bracket

Made from impact resistant plastic. It permits a wide range of aiming adjustments to be made and is 155mm long.

· Mounting screws and







External CCD Camera Housing Mounting Bracket

This heavy-duty aluminium bracket is designed to mount our large indoor/outdoor professional camera housing and professional range of CCD cameras. It is suitable for either internal or external use and the camera angle is fully adjustable.

- Mounting screws and wall plugs included
 Maximum payload 8kg
 Supplied in silver finish

- Bracket height is 290mm



7	Cat.	Qty 1+	Qty 2+	Qty 4+
	QC-3337	\$19.95	\$17.70	\$15.70

Suction Mount Camera Pod

Mount your digital camera or video camera on to any smooth surface - glass, car body, desk etc. The head has a ball swivel joint with a 90° range of movement and the shaft can be bent up to 180° to position your camera exactly where you want it. The 1/4-20 thread fits any standard tripod mount and will support up to about 1.5kg in weight.

- Ideal for sports, nature or travel photography.
- Height: 225mm Base diameter 67mm Shaft diameter 12mm



Qty 4+ \$15.70 Cat. OC-3327 \$17.70 \$19 95

WARNING SIGNS & STICKERS

CCTV Sticker - Large Size

Visible deterrent to intruders. Bright yellow to attract attention. Partner with a dummy camera or two for a complete faux security system or just to warn that the real thing is installed.

• Dimensions: 110 x 110mm

Cat. Qty 1+ Qty 4+ Qty 8+ LA-5101 \$3.95 \$3.45 \$3.15

Surveillance Warning Sign 300 x 300mm

Visual deterrents are one of the most effective security measures you can use. This sign will ward off thieves and let them know you have state-of-the-art surveillance on your property -even if you don't. It's made of acrylic, so it's lightweight and durable.

• Dimensions: 300 x 300mm

Cat. Qty 2+ Qty 4+ I A-5115 \$14.95 \$13.35 \$12.70

CCTV Warning Sign

Prominent warning sign for CCTV or dummy surveillance applications. Made from acrylic for durability

• Dimensions: 300(W) x 210(H)mm



WARNING

Qty 4+ Qty 8+ Cat. Qty 1+ LA-5114 \$14.95 \$13.35 \$11.70

Solar CCTV Warning Sign

A visible deterrent that will really get attention. With a built-in solar cell, this CCTV Warning sign flashes when there is light available. Double sided tape is included for convenient mounting to any surface. Ideal for shops, homes, garages or anywhere you need to advise would-be robbers that you have an expensive CCTV surveillance system. Even if you don't.



WARNING

Premises

under 24Hr

surveillance

• Dimensions: 80(L) x 80(W)mm

71	Cat.	Qty 1+	Qty 4+	Qty 8+
	LA-5103	\$14.95	\$13.35	\$11.70

CCTV POWER SUPPLIES

2 Wire CCTV Video / Power Processor

Dramatically reduce the cost of your next CCTV installation. Run composite video and power from CCTV cameras over distances up to 500m on UTP - no coax or separate power supplies required. Suitable for cameras that operate on 12VDC @ 350mA max. With a built in DSP, it eliminates any interference picked up within the length of the cable providing you with crystal clear video images.

Two types available: the single channel model runs a single camera; the four channel model enables you to run four cameras over a single run of CAT5 cable - video, power, the lot.

SINGLE CHANNEL CCTV VIDEO/POWER PROCESSOR

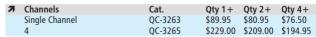
Cat QC-3263

Video output 1Vp-p 75-ohm
Dimensions: 110(L) x 72(W) x 28(H)mm

4 CHANNEL CCTV VIDEO/POWER PROCESSOR

Cat OC-3265

Dimensions: 145(L) x 80(W) x 28(H)mm



CCTV Power Supplies & Accessories

CCTV POWER SUPPLIES (CONTINUED)

12VDC CCTV Mains Power Supplies

Mains power supplies suitable for CCTV installations, with multi-channel outputs for each individual camera. Housed in a rugged lockable steel enclosure they are designed for permanent professional installations. These power supplies use switchmode technology which has short circuit protection, over current and overvoltage protection. Must be installed by a licensed Electrician. Two versions:

4 X SEPARATE 12-14VDC CHANNELS Cat. MP-3850 8 X SEPARATE 12-14VDC CHANNELS Cat. MP-3852

Both units have:

- Each DC power channel has secure, screw down terminals
- Mains hardwire connection via screw down terminals with safety cover
- Each 12VDC output channel is individually fused, and can be switched ON/OFF with jumpers
- Output voltage: adjustable from 11-13VDC
- Output current: MP-3850 3.0A total MP-3852 5.0A total
- AC input: 100-240V 50-60Hz
- LED Power on status on locked nanel face
- Dimensions

MP-3850 163(L) x 163(W) x 48(D)mm MP-3852 203(L) x 163(W) x 54(D)mm





WARNING: Whilst these units have a secure plastic cover over the switchmode circuitry, mains wiring is still accessible. We strongly recommend that only licensed electricians are used to connect the unit to power mains



mmm

7	Channels	Cat.	Qty 1+	Qty 2+	Qty 4+
	4	MP-3850	\$49.95	\$44.90	\$42.45
	8	MP-3852	\$79.95	\$71.95	\$67.95

12VDC CCTV Power Supply with Battery Backup

To round out any professional CCTV installation, some kind of power backup protection needs to be provided in case any would be thieves decide to cut the power. This handy CCTV power supply solves both the problem of supplying power to a multiple camera installation and providing that power backup. When mains power is provided the backup battery (available separately) is charged, but when mains power is interrupted, the unit powers the load from the backup battery. Features switchmode technology, with all components housed in a rugged metal case with lockable front panel designed for wall mounting. Requires backup battery: 12V 7Ah size SLA (use our SB-2486)

- Over current, short circuit and over voltage protection
 Separate battery charging circuit with fast changeover and low battery voltage cut-off
 Each DC output has fuse and varistor
- protection, LED indicator and ON/OFF iumper switch
- LED indicators for power,
- backup and charge Input: 100-240VAC, 50-60Hz
- Output: 12VDC, 5.0A maximum (8 separate outputs) Dimensions: 263(L) x 195(W) x 64(D)mm

7	Channels	Cat.	Qty 1+	Qty 2+	Qty 4+
	8	MP-3855	\$89.95	\$80.95	\$76.50

CCTV Power Distributor Box

Makes distributing power to multiple CCTV cameras a simple matter Simply connect a common source up to 30VDC and distribute it to up to 9 slave devices. Screw terminal connection.

- · Individually protected PTC output
- Individual status LED indicators
 1 30V AC or DC input
- Dimensions: 138(L) x 65(W) x 28(H)mm

7	Cat.	Qty 1+	Qty 2+	Qty 4+
	MP-3351	\$39.95	\$35.90	\$33.90

AC/DC - DC Converter 24 - 12VDC 1A

Trying to get power for CCTV and security cameras over a long run without losses is challenging to say the least. Solve the problem quickly and easily by sending 24VAC down the long run, then converting it to 12VDC when you get it where you need it.

· Connection is by screw terminals

Specifications	
Input	20 - 28VAC, 16 - 30VDC
Output	12VDC regulated
Output current	1A max
Dimensions	90(L) x 25(W) x 25(H)mm



24VAC/DC to 12VDC 300mA Adaptor

This simple looking device consists of a tiny 40 x 25 x 19mm module with 300mm leads connected to each end. On the input side there is a 22AWG terminal block for connecting a 24V AC or DC source. On the output side, there is a 2.1mm DC plug where you have a regulated 12VDC supply, at up to 300mA. The AC input can be 20 - 28V, and the DC input can be 16 - 30V.



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	MP-3069	\$22.95	\$20.35	\$18.35

CCTV LEADS & ACCESSORIES

CCD Camera Power Extension Lead

Extend the plugpack lead for CCD cameras.

- · Consists of 2.1mm male to female.
- Plug OD 5.5mm.



7	Cat.	Qty 1+	Qty 2+	Qty 4+
5 metre	WQ-7285	\$9.95	\$8.75	\$8.25

Microphone/Amp for CCTV Cameras

Easy add-on mini microphone with built-in amp for cameras that require an audio function. Simple to install and ideal for all surveillance applications

- High sensitivity microphone (-65dB)
- 12VDC operation
 Length: Approx 500mm



7	Cat.	Qty 1+	Qty 2+	Qty 4+
	QC-3434	\$19.95	\$17.70	\$16.70

CCD Camera Extension Leads

The easy way to extend the length of CCD camera cables. The leads have 3 joined cables, BNC plug to plug, RCA plug to plug, and DC power male to female. The video cable used is quality RG59U, and the power cable for the shorter lengths is 24 gauge, and the 2 longer lengths are 18 gauge



7	Cat.	Qty 1+	Qty 2+	Qty 4+
5 metre	WQ-7275	\$19.95	\$17.70	\$16.70
10 metre	WQ-7276	\$24.95	\$22.35	\$20.95
15 metre	WQ-7277	\$34.95	\$31.45	\$29.90
20 metre	WQ-7278	\$44.95	\$40.45	\$37.95

DC Power Leads - 2.1mm Plugs to Socket

Run multiple devices from a single power supply or extend the low voltage cable between a plugpack and a device. Ideal for surveillance applications and available in a range of versions to suit many applications. All cables are pre-made with moulded DC plugs and sockets.



- Three types available.DC Plug / Socket Dimensions: 2.1(ID) x 5.5(OD) x 10(L)mm

			0		PRICE
7		Cat.	Qty 1+	Qty 2+	Qty 4+
	1 Socket to 2 plugs - 200mm	WQ-7280	\$7.95	\$6.95	\$6.75
	1 Socket to 2 plugs - 2 metres	WQ-7284	\$8.95	\$7.95	\$7.50
	1 Socket to 4 plugs - 2 metres	WO-7281	\$9.95	\$8.75	\$8.25

Video Ground Loop Isolator

Ground loops are a primary cause of poor image quality in CCTV systems. This passive isolator can be easily installed in new or existing system and is useful when video signals are being transmitted between points with different ground potentials.

Specifications	
Insertion loss	0.5dB
Frequency response	-3dB @ 10MHz
Input impedance	75 ohm
Output impedance	75 ohm
Isolation voltage	600VDC.

Isolation voltage	600VDC.			
7		Cat.	Qty 1+	Qty 2
		OC-3432	\$59.95	\$53.9



\$50.95

VIDEO PROCESSOR

Cat5 to BNC Video Baluns

These devices simplify CCTV cabling and increase transmission distances without the need for video amplifiers. Ideal for use when covering long distances, or where an existing cable can be repurposed to carry the video signal, you simply connect the required balun to at each surveillance device and link the two points using low cost UTP cable such as Cat5, Cat5e, or Cat6. By utilising a single cable to carry multiple signals you can also save a lot of time installing cables and occupy less space in cable ducts. Available in multiple formats to cover a variety of applications, they are all passive devices requiring no power to convert the signals. Depending on how many signals are on one cable they are suitable for carrying video signals for distances up to 300m for colour or 600m for B&W*. In all cases they require an uninterrupted signal path to function, ie the cable can go through a patch panel, but not through a network switch or hub.

• Transmission distances stated are for solid core UTP cables and will be reduced by 20 to 30% if using stranded UTP cable





Single Video Signal Baluns

Designed for direct connection to a single video source, these baluns are great for Designed for direct connection to a single video source, these baluns are great for installations where a single camera is a long distance from the display, or where existing Cat5 cable will save you from running a new coax cable. Available in two versions, the single block module accepts a RJ45 terminated patch cable while the flylead twin pack will connect directly to a twisted pair using fast-on terminals. Using the flylead twin pack you can also connect up to four cameras through a single cable by attaching a separate balun to each Cat5 pair.



7	Cat.	Qty 1+	Qty 2+	Qty 4+
Each	QC-3422	\$9.95	\$8.75	\$8.25
Pair NEW	QC-3660	\$14.95	\$13.35	\$12.70

Combination Signal Baluns

SURVEIL AND

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Allowing complete connection of a camera through a single cable, these baluns combine video, power and data/audio signals for transmission over separate pairs of the Cat5 cable. Each kit contains a balun for both the transmitter and receiver ends. with all connectors designed for quick installation of your surveillance equipment. Both

kits will carry video signals over distances up to 200m with one kit including a RCA plug for audio signals while the other has a data flylead suitable for items such as PTZ cameras or alarm sensors

• Suitable for low voltage power

- · Short circuit protection for power
- Transmits video up to 200m for colour
- and 400m for B&W

Cats tolliection	M42.2	UCKEL		
Video connection	BNC	plug	2012	
Power connection	2.1mm plug	and socket		
Auxiliary connection		Audio RCA plug		
Balun Dimensions	48(L) x 25(W) x 20(H)mm	42(L) x 21(W) x 21	(D)mm	SEPR
Lead length	330mm	80mm		WARRANTY
7	Cat.	Qty 1+	Qty 2+	Qty 4+
			. ,	. ,
Pair	QC-3433	3 \$49.95	\$44.90	\$42.45
Pair NEW	QC-3662	\$29.95	\$26.90	\$25.45

Video/Power/Audio

Multiple Video Signal Baluns

Use one Cat5 cable to connect up to four CCTV cameras. Simplify your CCTV camera installation, reduce costs and increase transmission distance by converting from coaxial to Cat5 cabling It is also suitable for multimedia presentation, video conferencing and remote monitor (video/audio) applications. Can be used with a four way balun on each end or combined with single termination baluns such as Cat QC-3660 shown above

Video/Power/Data

- Sold individually
- Includes mounting bracket
- Transmits video up to 300m for colour and 500m for B&W³
- Dimensions: 130(L) x 52(W) x 28(H) mm

7	Cat.	Qty 1+	Qty 2+	Qty 4+
NEW	QC-3664	\$29.95	\$26.90	\$25.45

Freecall order hotline: 1800 022 888

Four Channel Colour Video Processor (QUAD)

A professional quality 4 channel colour quad processor packed with features you would expect to find in units costing considerably more. The processor will accept up to 4 camera inputs via BNC connections and can display

camera images in sequence or a 4-way guad picture. The

system incorporates freeze frame, zoom and picture-in-picture as well as signal adjustments for the camera. Camera inputs can also be given a unique eight character name as an aid to image identification. Other features include mirror image, motion detection, detection sensitivity adjustment, timer detection, and a 60 line event log. The system is housed in a slim line metal case and a mains adaptor is included.

- 4 x camera innuts
- Motion detection
- Event log
 Signal adjustment for colour, hue, etc.

Monitor & record outputs
 Dimensions: 210(W) x 130(D) x 44mm(H)mm







Cat.	Qty 1+	Qty 2+	Qty 4+
QC-3376	\$99.00	\$88.95	\$83.95

Four Input IP Video Server

This 4 input video capture unit can be given a fixed IP address which allows all 4 video inputs to be viewed via a web browser from anywhere in the world. Included in the tiny 100 x 55 x 28mm box is a 4 input video capture card with motion detection, single audio input, an Ethernet connection, and a Linux based web server. Once the unit is configured, it can operate without a computer and can broadcast to the world with just an internet interface and cameras. Remote configuration is also possible and is password protected for security purposes. The motion sensing capability is also quite sophisticated and the device can email a picture of the event to a pre-defined email address or record to the images to disk. All in all, this is an advanced system with almost endless surveillance possibilities.

- 4 Video inputs
- 1 Audio input Motion detection
- Email alert capability Variable screen layout 1x1, 2x2, 3x3 or 4x4
- Resolution up to 640x480
- Motion JPEG video capture up to 25fps Selectable video quality
- Brightness, contrast, hue and saturation adjustment
- Embedded Web Server
- FTP of captured images
- Supports TCP/IP, DHCP, and PPPoE





7	Cat.	Qty 1+	Qty 2+	Qty 4+
	QC-3393	\$199.00	\$178.95	\$168.95

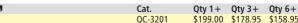
CAMERA ACCESSORIES

2.4GHz CCTV Wireless AV Sender - DIGITAL

Wirelessly transmits DIGITAL high resolution D1 images (720 x 576) to a digital video recorder up to 300m away from the camera source. This provides an excellent solution for troublesome CCTV installations that require cabling in wall cavities where only a garden gnome could fit. Due to the sometimes "crowded" nature of the 2.4GHz band this unit employs FHSS which hops frequencies to avoid interference. This feature also adds a much needed layer of a security by making the signals very difficult to intercept. Each unit features mounting holes for secure attachment to a wall or ceiling, an antenna for each unit, and compact 9VDC power supplies making installation a breeze

and and compact 5 to e porter.	app	nes making instantation a proceed
Specifications		
Operation frequency range		2400-2483MHz
Channel switching		FHSS mode up to 80 channels
Video modulation/demodulation	type	BPSK, QPSK, 16-QAM
RF bandwidth		3Mbps
Transmission range		300m in clear line of sight
Video Transmitter		
Voltage	9VD	C - 12 VDC (9VDC power supply included)
Supply current	1000	mA max
Transmission powe:	20dl	Bm
Video input impedance	75ol	hm
Input video/audio jack	BNC	•
Antenna gain	2dBi	
Antenna port impedance	50ol	hm ————————————————————————————————————
Dimensions (excluding antenna)	163((L) x 97(W) x 48(H)mm
Video Receiver		2
Voltage	9VD	OC - 12 VDC (9VDC power supply included)

Video Receiver	
Voltage	9VDC - 12 VDC (9VDC power supply included)
Supply current	600mA max
Sensitivity	80dBm
Output image resolution	720 x 480 (D1) at 30fps, 720 x 576 at 25fps
Video output signal level	1Vp-p,typ
Video output impedance	75ohm
Output video/audio jack	BNC
Antenna gain	2dBi
Antenna port impedance	50ohm
Dimensions (excluding antenna)	163(L) x 97(W) x 48(H)mm



Gadgets & Gizmos

At Jaycar we designed our gadget section for someone who wasn't a hardcore electronic person and accidentaly walked into the store and had a panic attack.

Seriously, we still love our gadgets - even though the range has narrowed down to helicopters, helicopters, helicopters accessories and some other stuff.

Jaycar has somehow filled a niche with small model helicopters. We think our success - once again - is our willingness to support a product like a helicopter with spares & accessory support.

And yes, we do have some other exciting products. Please have a browse.



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REMOTE CONTROL VEHICLES

Wi-Fi iPad® iPhone® iPod® Controlled **Rover with Adjustable Camera and IR**

Have endless hours of fun, sneaking up on your family and friends with the Wi-Fi iPad® / iPhone® / iPod® controlled rover. Take control of the rover by downloading the free app from the iTunes. App Store, installing it on your device, and then connecting to it via a Wi-Fi network. To drive the rover, use the touch screen interface provided by the app or enable Connecting to it via a wir-i network. To three the rover, use the footbast camera streams live video of the image directly in front the rover, allowing you to continue driving even if it's out of sight, behind walls, etc. Don't let complete darkness deter you from your exploration, turn on the IR lamp and continue your journey. Or be a spy, take snapshots as you move along or listen in on your subject using the built-in microphone. The rover runs on 6 x AA batteries (not included) and has a range of up to 60m line of sight.

- Built-in microphone for live audio streaming
- Onboard camera for live video stream or to take snapshots
- Night vision mode via IR illumination
- Range up to 60m line of sight
 G-Drive Mode, tilt your device like a steering wheel
- Requires 6 x AA batteries (not included)
- Free app via the iTunes® App Store
 Weight: approximately 1.04kg
 Suitable for ages 14+
- Dimensions with antenna: 196(L) x 260(W) x 196(H)mm

Note: iPad® not included



Qty3+

\$151.95

Control and view live video on an iPhone®, iPod®, iPad® (not included)



1:12 Scale High Speed RC Truggy S800
Action packed driving straight from the box! This remote control electric monster racing to
performance with unstoppable off road handling at a very low price. It features a respon-

GT-3598

Cat.

truck offers high sive steering system, periorinance with discoppanie on road inflaming at a very low line. It leadings a responsive stearing system, multiple shock positions with front and rear fully independent suspension. Not only is it fast, travelling 18km/h at maximum speed but it also gives sensational driving performance and agility with 4WD shaft drive and extra large volume shocks for optimal handling. The high-grip tyres are designed for maximum traction ideal for sharp corner turns and scaling up hills. 7.2V 1100mAH Ni-MH rechargeable battery included.

- Available in red, green or blue4hr charge for 12min driving time
- Mains charger included
- Suitable for ages 14+

Specifications	
Gear Ratio	1:15.71
Ground Clearance	25mm
Wheel Width	50mm
Wheel Dia	84mm
Dimensions	335(L) x 270(W) x 115(H)mm

Dimensions	335(L) x 270(W) x 115(H)mm	
7		Cat.	Qty 1
High Spee	d Truggy	GT-3687	\$79.9!
Spare Par	ts		
Spare Rech	nargeable Ni-MH	Battery GT-3688	\$19.9



Qty 1+

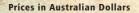
\$169.00



Qty 6+

\$134.95

Qty 1+	Qty 3+	Qty 6+
\$79.95	\$71.95	\$63.95
\$19.95	\$17.70	\$15.70



RC VEHICLES

Mini High Speed RC Stunt Car

Be the envy of your friends with this super fast RC car designed for thrills and spills. The two protection rings act as a roll cage to help make the car roll over freely and keep on going even from the most spectacular crash landing. Supplied with a user friendly remote control and a launch pad for stunt jumps. Recharge the car via the battery powered charger pack.

- Recharge in 30 minutes for about 7 9 minutes of play time
- Available in red or blue
 Remote requires 2 x AA batteries
- Charger pack requires 4 x AA batteries
 Suitable for ages 6+
 Dimensions: 105(L) x 70(W)mm







Qty 1+ GT-3293

Qty 3+ \$17.70

Qty 6+ \$15.70

Two-Player RC Speed Bumpers

High speed bumper vehicles designed for thrilling head to head RC battles. Counter attack your opponents bumper for a glorious victory. The object of the game is to knock the opposing rider off its vehicle by making contact with one of the bumper tabs located on both sides. This exciting two-player action game includes two battery operated vehicles & two wireless remote controls to match. Controls are easy to use with its ergonomic design & omni-directional operation. Batteries not included.

- Includes 2 x vehicles and 2 x wireless remote controls
- Each vehicle requires 3 x AAA batteries
- Each remote requires 2 x AAA batteries
- Suitable for ages 10+
- Vehicles 125mm long





7	Cat.	Qty 1+	Qty 3+	Qty 6+
	GT-3698	\$39.95	\$35.90	\$31.90

Miniature Spy Cam

This tiny camera measures 80mm long and 19mm round and is designed to mount well, on anything really! It comes with a special bracket for the purpose. It can, of course mount on stuff, such as large model planes or cars. It weighs less than 30 grams. The unit features a ball swivel lens like you see on real military helicopters and delivers its recorded video to your computer via a mini USB port, which also recharges the camera battery.

- 4GB internal memory
- 4 hour recording time
 Continuous recording or programmable still photo recording



QC-3820

Qty 1+ \$59.00



DID YOU KNOW...

Laszlo Jozsef Bíro (1899-1985) Invented the Ballpoint Pen and patented it in Britain in 1938

Freecall order hotline: 1800 022 888

Video Camera Kit for RC Models

Now you can capture all those amazing moments from your remote control adventures. Mount the camera unit to a remote control car, truck; and being featherweight can also be mounted on to helicopters. Video capture format is 640 x 480 pixels at 30fps and is recorded onto the included 512MB MicroSD Card. Videos can be uploaded to your Mac or PC through the MicroSD to USB Adaptor. Custom wiring and mounting will be required.

Kit contains:

- Camera module
 512MB MicroSD Card
- MicroSD to USB Adaptor
- Mounting screws and screwdriver
- Dimensions: 55(L) x 32(W) x 10(H)mm





Cat. GT-3541

Qty 1+ Qty 3+ Qty 6+ \$35.90 \$31.90

DISCOUNT TRADE CARD

If you regularly purchase electrical or electronic goods to be used for business purposes you may qualify for a **Taycar Electronics Trade Card** which entitles you to substantial discounts on most Jaycar products. Discounts range from 5% to 30% depending on the type and quantity of product purchased. **Excludes Kits & Books.**

* ABN will be required - see our website or Store Manager for further details.



GADG

RC Helicopters

RC HELICOPTERS - DOUBLE BLADE

Mini 3 Channel RC Helicopter with Gyroscope

A 3 channel chopper employing a coaxial rotor design resulting in a strong gyroscopic effect for stable flight control. Able to fly in six directions which include rotation clockwise/anticlockwise, forward/backward and up/down this chopper will provide hours of fun for children and adults alike. The engine will power off when the blades are choked to prevent the chopper from shredding its thrust mechanism. Transmitting on 2.4GHz the signal is stable and the range is extended.

Specifications	
Channels	3
Batteries	3.7V 150mAh Li-Po
Recommended ages	8+
Flight time	5-7 mins
Charge time	50-60 mins
Charges off remote	Yes
Charges off PSU	No
Charges off USB	Yes
Gyroscope	Yes
Transmitter	2.4GHz
Dimensions	220(L) x 98(W) x 38(W)mm

Cat.	Qty 1+	Otv 3+
GT-3565	\$39.95	\$35.90



4 Channel IR Helicopter with Gyroscope
Outstanding performance with stable flight and magnificent hovering capabilities; all courtesy of the on-board gyroscope and a total of 4 motors! Dip, turn, spin or hover just like you see in the movies and if the batteries run out simply recharge through the quick connect lead from the remote controller. Equipped with a full metal frame chassis, it is very durable and shockproof. Excellent for beginners and first time flyers.



Specifications	
Channels	4
Batteries	Requires 6 x AA
Suitable for ages	14+
Flight time	5-7 mins
Charge time	40-50 mins
Charges off remote	Yes
Charges off PSU	No
Charges off USB	No
Gyroscope	Yes
Dimensions	230(L)mm

4	7	Cat.	Qty 1+	Qty 3+	Qty 6+
	Helicopter	GT-3386	\$49.95	\$44.90	\$39.90
4	■ Spare Parts				
	Blade Set Main A+B with 3 Rotors	GT-3387	\$12.95	\$11.35	\$10.35

3 Channel Double Blade RC Helicopter with Gyroscope S301G

The defiance of gravity continues with this powerful 3 channel gyroscope equipped chopper. Excellent flight control enables smooth turns and banks in the sky. Its aluminium framed with a very handy built-in safety feature which will immediately shut off the motor when the blades are jammed. Also features bright white LED search light above the cockpit and flashing LED below.

Specifications	
Flight capability	Up/Down/Left/Right/Forward/Backward
Channels	3
Batteries	Requires 4 x AA
Recommended ages	14+
Flight time	6-8 mins
Charge time	70 mins
Charges off remote	No
Charges off PSU	Yes
Charges off USB	No
Gyroscope	Yes
Transmitter	27MHz
Dimensions	450(L) x 83(W) x 200(H)mm

71	Cat.	Qty 1+	Qty 3+
	GT-3530	\$69.95	\$62.95





Officially Licensed Avatar® RC Chopper

Officially licenced remote control replica of the Aerospatiale SA-2 Samson twin ducted-fan style chopper featured in the film Avatar®. Though this model isn't packing door guns or detachable rocket pods, it is an excellent recreation of the vehicle that successfully destroyed the Hometree and wreaked havoc amongst the native population of Pandora. The detail on this model is intricate to the last detail perfectly capturing the coolness factor from the movie. RDA logos (the evil corporation) feature on the blades and fuselage and the drab grey colour finish complete the corporate-military look. Specification

Like the vehicle in the film, this unit is incredibly manoeuvrable and stable in flight. It's 4 channels on the 2.4GHz spectrum allow you to turn, spin, dip or hover with ease so you can dodge those imaginary

mountain banshee without too much fuss.

Channels Batteries Suitable for ages Requires 3 x AA Flight time 6 mins Charge time 1 hou Charges off remote No Charges off PSU Yes Charges off USB Nο Gyroscope Yes

245(L)mm

• Frequency: 2.4GHz

See website for more specifications.

7		Cat.	Qty 1+	Qty 3+	Qty 6+
		GT-3480	\$99.00	\$88.95	\$78.95
7	Spare Parts				
	Blade Set Main A+B & Tail	GT-3481	\$14.95	\$13.35	\$11.70
	Main A & B Gear Set	GT-3482	\$9.95	\$8.75	\$7.75
	Balance Bar, Connecting	GT-3483	\$9.95	\$8.75	\$7.75
	Buckle and Blade Grip Set				



Dimensions

3 Channel RC Helicopter with Gyro

Introducing our biggest and most powerful remote control helicopter! This 3 channel helicopter has a very strong aluminium frame and is matched with a powerful motor to provide enormous lift. With its substantial weight and power, it provide enormous Int. With its substantial weight and power, is advisable to fly this chopper in a large open spaces (can be flown outdoors in calm conditions) away from obstacles. Features a built in gyroscope which provides stable flight. It is very easy to fly, controlled with its 3 Channel 27MHz Remote. Equipped with a high capacity Li-Po battery which provides up to 8 minutes of flight time. Supplied with mains charger.

- 7.4V 1500mAh Li-Po rechargeable
- 27MHz Remote control
- Full scale remote control
- Smooth hovering performance
 Long battery life
 Energy saving power cut off

Note: Due to its size and power, adult supervision is recommended.

b	attery included		
	Specifications		
	Channels	3	1
	Batteries	Requires 4 x AA	STATE OF THE PERSON NAMED IN
	Suitable for ages	14+	545
	Flight time	8 mins	
	Charge time	160 mins	S. C.
	Charges off remote	No	
	Charges off PSU	Yes	
	Charges off USB	No	
	Gyroscope	Yes	
	Dimensions	775(L) x 130(W) x 305(H)mm	
	Cat.	Otv 1+	Otv 3+

h mains charger.					
ttery included		1			
pecifications					
Channels	3	1			1
Batteries	Requires 4 x AA	D. F. A.	30 = 1		4-4
uitable for ages	14+	543	second security -		6
light time	8 mins		- Co		
harge time	160 mins	N			
Charges off remote	No		4		- 4
Charges off PSU	Yes		-	•	(
Charges off USB	No			Note: Available	
Syroscope	Yes			in red or yellow	
Dimensions	775(L) x 130(W) x 305(H)mm			in rea or yenow	
_					
Cat.	Qty 1+	Qty 3+	Qty 6+		
GT-3360	\$99.95	\$89.95	\$79.95		
				limit	

7		Cat.	Qty 1+	Qty 3+	Qty 6+
		GT-3360	\$99.95	\$89.95	\$79.95
7	Spare Parts				
	Main Rotor Blade and Tail Set	GT-3361	\$9.95	\$8.75	\$7.75
	Main A & B Gear Set	GT-3362	\$9.95	\$8.75	\$7.75
	Balance Bar, Connecting Buckle and Blade Grip Set	GT-3363	\$9.95	\$8.75	\$7.75
	Spare 7.4V Li-Po Battery	GT-3364	\$29.95	\$26.90	\$23.70



SINGLE BLADE HELICOPTER



4 Channel Single Blade RC Helicopter with Gyroscope

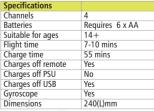
Rise above the ranks from beginner pilot and mix it up with the big boys with this single blade remote control helicopter. The advanced single blade design offers better performance, speed and maneuverability than its double bladed counterparts. This 4

channel helicopter allows a wider range of movement and has a built in gyroscope for stability. It is also equipped with a 2.4GHz remote control offering more responsive control. Offers up to 10 minute flight time and can be recharged through the included USB charger. A truly advanced and versatile chopper that will challenge your pilot skills taking it to new heights.

- Single blade3.7V 150mAh Li-Po battery included

					-
7		Cat.	Qty 1+	Qty 3+	Qty 6+
		GT-3430	\$69.95	\$62.95	\$55.95
7	Spare Parts				
	Rotor Blade and Tail Set	GT-3431	\$9.95	\$8.75	\$7.75
	Balance Bar, Connecting	GT-3432	\$9.95	\$8.75	\$7.75
	Buckle and Blade Grip Set				
	Main A & B Gear Set	GT-3433	\$9.95	\$8.75	\$7.75
	Spare Li-Po Battery	GT-3434	\$14.95	\$13.35	\$11.70

Freecall order hotline: 1800 022 888





RC Helicopters & Spares

3 Channel Single Blade RC Helicopter with Video Recording

Single blade RC choppers offer better performance, speed and manoeuvrability than their less able double bladed counterparts. Document your amazing pilot skills and amass a collage of amazing videos of trench runs, tree dodges, wall scrapes, and perfect landings. The chopper has a built in gyroscope which gives pilots excellent flight control. It also offers up to 8 minutes of flight time and can be recharged with the included mains charger. Video and image capture is initiated with the corresponding buttons on the remote control.





- 512MB MicroSD card included
- Video capture: 640 x 480 at 30fps
 Image capture: 640 x 480 IPG

illiage captule. 040 X 400 Ji G				
Specifications				
Channels	3			
Batteries	4 x AA			
Recommended ages	8+			
Flight time	8mins			
Charge time	2-3 hrs			
Charges off remote	No			
Charges off PSU	Yes			
Charges off USB	No			
Transmitter	27MHz			
Dimensions	495(L) x 65(W) x 14(H)mm			



GT-3562 \$99.00 SPARE PARTS & SETS FOR SUPERCEDED RC HELICOPTERS

We carry a limited range of spare parts & sets of spares for Helicopters we've previously stocked. Here are just a few of our most popular. For more information ask in-store or visit online.







TO SUIT APACHE 4CH RC HELICOPTER CAT. GT-3263

7	Spare Parts	Cat.	Qty 1+	Qty 3+	Qty 6+
	Spare Battery	GT-3300	\$44.95	\$40.45	\$35.90
	Stabilizer Bar	GT-3301	\$6.95	\$6.25	\$5.50
	Gear Shaft B	GT-3302	\$9.95	\$8.75	\$7.75
	Gear	GT-3303	\$4.95	\$4.45	\$3.90
	Tail Rotor Rack	GT-3304	\$6.95	\$6.25	\$5.50
	Connect Buckle (2Pk)	GT-3305	\$1.00	\$0.90	\$0.80

SPARE PARTS TO SUIT GT-3382

7		Cat.	Qty 1+	Qty 3+	Qty 6+
	Main Rotor Set	GT-3725	\$9.95	\$8.75	\$7.75
	Balance Bar & Connecting Buckle	GT-3726	\$6.95	\$6.25	\$5.50
	Gear & Inner Shaft Set	GT-3727	\$14.95	\$13.35	\$11.70
	Tail Rotor & Rotor Rack	GT-3728	\$4.95	\$4.45	\$3.90
	Blade Grip & Inner Shaft	GT-3729	\$4.95	\$4.45	\$3.90

TO SUIT MINI 4CH RC HELICOPTER CAT. GT-3279

7		Cat.	Qty 1+	Qty 3+	Qty 6+
	Main Blade	GT-3730	\$9.95	\$8.75	\$7.75
	Gear Set	GT-3731	\$7.95	\$6.95	\$6.25
	Flybar, Holder & Link Rods	GT-3733	\$9.95	\$8.75	\$7.75
	Tail Boom, Blade & Rotor	GT-3734	\$14.95	\$13.35	\$11.70

TO SUIT 2.4GHZ 4CH. HELICOPTER CAT. GT-3384

7		Cat.	Qty 1+	Qty 3+	Qty 6+
	Rotor Blade Set	GT-3710	\$9.95	\$8.75	\$7.75
	Landing Skids Set	GT-3711	\$19.95	\$17.70	\$15.70
	Tail Rotot Support	GT-3712	\$9.95	\$8.75	\$7.75
	Gear Set	GT-3713	\$7.95	\$6.95	\$6.25
	Flybar	GT-3714	\$17.95	\$15.95	\$14.35
	Outer Shaft	GT-3715	\$14.95	\$13.35	\$11.70
	Inner Shaft	GT-3716	\$14.95	\$13.35	\$11.70
	Motor Set	GT-3717	\$29.95	\$26.90	\$23.70
	Main Frame	GT-3718	\$6.95	\$6.25	\$5.50
	Ball Linkage Set	GT-3719	\$6.95	\$6.25	\$5.50
	Swashplate	GT-3720	\$9.95	\$8.75	\$7.75
	Under T Shape Holder	GT-3721	\$3.95	\$3.45	\$3.15

SPARE PARTS TO SUIT GT-3306

Spare Battery

Gear Set

Rotor Blade Set

7	Cat.	Qty 1+	Qty 3+	Qty 6+		
Spare Blade Set & Tail Rotor	GT-3307	\$9.95	\$8.75	\$7.75		
SPARE PARTS TO SUIT GT-3310						
7	Cat.	Qty 1+	Qty 3+	Qty 6+		
Spare Blade Set & Tail Rotor	GT-3311	\$9.95	\$8.75	\$7.75		
Balance Bar, Connecting Buckle	e GT-3312	\$9.95	\$8.75	\$7.75		
Main A & B Gear Set	GT-3313	\$6.95	\$6.25	\$5.50		
Inner Shaft Head	GT-3314	\$2.95	\$2.60	\$2.30		
SPARE PARTS TO SUIT GT-3340						

Cat.

GT-3341

GT-3342

GT-3343

Qty 1+

\$29.95

\$9.95

\$7.95

\$7.95

Qty3+

\$26.90

\$8.75

\$6.95

\$6.95

SPARE PARTS TO SUIT GT-3460

7		Cat.	Qty 1+	Qty 3+	Qty 6+
	Rotor Blade and Tail Set	GT-3461	\$9.95	\$8.75	\$7.75
	Main Gear Set	GT-3462	\$9.95	\$8.75	\$7.75
	Balance Bar, Buckle & Blade Grip	GT-3463	\$9.95	\$8.75	\$7.75

Balance Bar / Connect Buckle GT-3344 SPARE PARTS TO SUIT GT-3350 & GT-3380

7	Cat.	Qty 1+	Qty 3+	Qty 6+
Spare Li-po Battery	GT-3359	\$19.95	\$17.70	\$15.70
Main Rotor Blade Set	GT-3700	\$9.95	\$8.75	\$7.75
Gear Set	GT-3701	\$6.95	\$6.25	\$5.50
Balance Bar & Connector Buckles	GT-3702	\$4.95	\$4.45	\$3.90
Tail Module & Rotor Blade	GT-3703	\$16.95	\$14.95	\$13.35
Frame, Shaft & Blade Grip	GT-3704	\$9.95	\$8.75	\$7.75

SPARE PARTS TO SUIT GT-3490

~		Cat.	Ųty I +	Ųιy ɔ+	Ųιy o+	
	Rotor Blade and Tail Set	GT-3491	\$9.95	\$8.75	\$7.75	
	Main A & B Gear Set	GT-3492	\$9.95	\$8.75	\$7.75	
	Balance Bar, Buckle & Blade Grip	GT-3493	\$9.95	\$8.75	\$7.75	
	Spare Li-Po Battery	GT-3494	\$19.95	\$17.70	\$15.70	



Qty 6+ \$23.70

\$7.75

\$6.25

\$6.25

RC VEHICLES SPARE PARTS

Spare parts to suit Remote Control electric vehicles GT-3670, GT-3672, GT-3674 and GT-3676







7	Spare Parts	Cat.	Qty 1+	Qty 3+	Qty 6+
	Suspension Hinge Brace - Pair (All models)	GT-3666	\$6.95	\$6.25	\$5.50
	Front Suspension Arm Mount (All models)	GT-3667	\$6.95	\$6.25	\$5.50
	Front Suspension Hinge - Pair (All models)	GT-3668	\$4.95	\$4.45	\$3.90
	Spur Gear for GT-3670, GT-3672 & GT-3676)	GT-3677	\$19.95	\$17.70	\$15.70
	Spur Gear 64 Tooth (GT-3670/72 only)	GT-3669	\$7.95	\$6.95	\$6.25
	Pinion Gear 23 Tooth (GT-3670 only)	GT-3681	\$4.95	\$4.45	\$3.90
	Pinion Gear 17 Tooth (GT-3672 only)	GT-3683	\$4.95	\$4.45	\$3.90
	Shock Absorber - Pair (GT-3672 only)	GT-3684	\$14.95	\$13.35	\$11.70
	Front Lower Suspension Arms - Pair (GT-3672 only)	GT-3685	\$9.95	\$8.75	\$7.75
	Front/Rear Dogbones - Pair (GT-3672 only)	GT-3686	\$8.95	\$7.95	\$6.95



GT-3684

1:10 Scale RC Car Brushless Motor / ESC Upgrade

Add serious tyre-shredding, wheel-standing horsepower to your 1:10 scale electric RC car. This is the electrical equivalent of putting a supercharged-427 in a Datsun 180B. The kit comprises two parts - a brushless motor and electronic speed controller (ESC) Installation is easy in our GT-3670 or GT-3672 RC cars, or any 1:10 scale RC car for that matter. Electrical termination for the battery is by flying leads so you can add your own connectors to suit (we recommend our PT-4450), and high-spec gold connectors are used for connection to the motor. This brushless motor and ESC combination can be powered by a normal 7.2V Ni-MH RC battery pack, but we seriously recommend using our SB-2310 3300mAh 7.4V LIPO battery pack to get the most from this serious upgrade to your RC car. See our website for a video demo of the awesome performance of this upgrade in our carpark.

Motor Specifications:

- Standard RC540 size motor (36mm x 50mm)
 Brushless motor 3300 rpm/Volt
 Shaft Diameter 3.175mm (1/8")

Electronic Speed

Controller Specifications: Low battery voltage cut-off to protect LiPO batteries

- from damage

 Over temperature protection

ADGETS & GIZ

Max current - 75A
 Battery Input - 7.2V Ni-MH, or 7.4V Li-Po

a	Cat.	Qty 1+	Qty 3+	Qty 6+
	GT-3675	\$199.00	\$178.95	\$158.95

RC Fail-Safe

Fitting a fail-safe device into your nitro powered cars and boats will give you added peace of mind. Should the radio gear lose its connection, this little device will revert the servo to a pre-set neutral position stopping the vehicle and avoiding any unnecessary collisions or runaways

Very cheap insurance for nitro-powered cars and boats.



6.0V 1600mAh Ni-MH RC Receiver Battery Packs

These high capacity rechargeable Ni-MH battery packs are the perfect solution to constantly replacing the receiver batteries in your RC car.

Available in two types, "hump pack" and "flat pack", to suit almost any RC car application. Each has five 1.2V 1/3A 1600mAh cells, and are fitted with standard 2-pin JST connectors.

HUMP PACK STYLE Cat SB-2302 Dimensions: 52 x 32 x 32mm 60mm lead

FLAT PACK STYLE

Cat SB-2304



Freecall order hotline: 1800 022 888

SB-2302

•	Dimensions:	86	Χ	32	Χ	17mm
•	80mm lead					

7		Cat.
	1 C O O A I- I I DI-	CD 2202

Qty8+ Qty 15+ Qty 1+ \$29.95 \$26.90 \$23.70 1600mAh Hump Pack 1600mAh Flat Pack SB-2304 \$29.95 \$26.90 \$23.70



Deans Style 60A 2 Pole Gold **Plated Connector Set**

These are the industry standard in high performance connectors. Rated number one by R/C Car Action, the world's leading R/C car racing magazine. These connectors offer considerably less resistance than their competitors and are rated at 60 amps

Supplied as a pair

3300mAh

7	Cat.	Qty 1+	Qty 10+	Qty 50+
	PT-4450	\$3.95	\$3.45	\$3.15

7.2V Ni-MH Stick - Pack RC Battery

High capacity, high current discharge Ni-MH packs for radio control cars. Fitted with standard "Tamiya" type plug.

SB-2312 7.2V Ni-MH 2000mAh RC Battery SB-2314 7.2V Ni-MH 3300mAh RC Battery



7.4V 3600mAh Lithium-Polymer Battery Pack

Lithium-Polymer (Li-Po) batteries are frequently found in most modern mobile phones and portable electronic devices. They offer excellent performance compared to Ni-MH and Ni-Cd batteries and can be consistently charged and discharged at a much higher rate. They are also smaller and weigh far less than their nickel based predecessors. This particular battery pack is the perfect upgrade for 1:10 scale electric remote control cars, and features standardised sizing and output cabling that are common with most 1:10 scale car batteries.

SB-2314

\$49.95

\$44.90

\$39.90

Specifications 7.4V Voltage 3600mAh Capacity Discharge rate (cont.) 20C Discharge rate (burst) 40C Output 12AWG silicone fly leads with Deans connector Charge input 3-pin balance connector Dimensions 137(L) x 45(W) x 23(H)mm Cat **Qty 10+ Qty 20+** \$71.95 \$63.95 SB-2311

RC FLYING MACHINES

Remote Control Flying Truck

Is it a car? Is it a plane? No, it's a flying truck! Send this radio controlled truck racing down a track to pick up speed before it launches into the air. Its advanced body design and controls allow you to easily control this flying truck like an aeroplane. Turn any road into a runway and let your kids amaze their friends with different aerial manoeuvres only this flying truck can do.



Cat.

GT-3389

4 Channel 4 Engine UFO

One of the weirdest flying contraptions we've ever seen. A four-engine, four-rotor flying widget. Each channel and motor on the craft is colour-coded so you can easily identify what makes it go where. Once you get the hang of it, you'll have hours of fun! It has a built-in rechargeable Li-ion battery that recharges from the remote unit. 20 minute charge gives about 5 minutes of flight time.



Cat. Qty 1+ GT-3782 \$39.95

hovercraft. It differs from a real hovercraft, however, in that there is no inflated

"cushion" of air. Instead this RC Racing Hovercaft uses tough abrasion resistant polyethylene foam as a kind of "skid" platform which also makes up the main

body, keeping overall weight to a minimum so that the whole craft semi-floats just above the ground when power is applied

RC HOVERCRAFT

Dual Brushless RC Racing Hovercraft

Capable of ridiculous speeds straight out of the box, this dual brushless fan Capable of ridiculous speeds straight out of the box, this dual brushless fan powered RC racing hovercraft is certainly not what you would come to expect when you think of a remote controlled hovercraft. This is the kind of product that makes you wish you were a kid again. Wobbling around at low speeds on a wussy pillow of air are not what this beast does - massive power slides, high speeds drifts and even jumps are all part of the repertoire. Two brushless ducted fan motors are responsible for the power, one blowing downwards to generate lift, and the second (and more powerful) motor providing the forward thrust. Such high speeds are capable due to some pretty basic physics, similar to a real Powered by a high capacity 1800mAh 11.1V Li-Po battery, and controlled by a very accurate 2.4GHz radio system.

- 2.4GHz RC unit included
- 11.1V 1800mAh 20C Li-Po battery included
- Tough polyethylene foam body
- Li-Po balance charger included
 Flexible Lexan cover
- · Ready to race

- Suitable for ages 8+
 Weight: 328g
 Dimensions: 360(L) x 220(W) x 115(H)mm

Optional Gyroscope sold separately Cat.GT-3741

Note: Not suitable for use on water.







7	Cat.	Qty 1-
RC Hovercraft	GT-3740	\$99.00
Gyroscope to suit	GT-3741	\$29.95

GREEN POWERED VEHICLES

Rechargeable Mini Solar RC Car

An educational and fun way to teach your children the benefits of solar power and renewable energy sources. This neat little remote control car runs on solar power! It has a solar panel on the roof of the car charging the on-board rechargeable batteries. It also has a charge dock station for the remote control. Despite being green, the car is very zippy thanks to its lightweight design. A full functional RC car, it has forward, reverse, left and right controls. Also comes

GT-3699

with a USB charger for those cloudy and rainy days.

- Rechargeable battery USB charging cable included · Suitable for
- ages 8+
 Dimensions: 240(L)mm





\$29.95

	anu
	• A

\$23.70

Qty3+

\$26.90

Salt Water Fuel Cell Engine Car Kit An entertaining educational kit demonstrating the concept

of a salt powered automotive engine. It gives the next generation a look at alternative means of propelling cars of the future. It works with a combination of salt water and magnesium plates. When salt water is added it dissolves the magnesium to form hydrogen which is attracted to the cathode creating a flow of electrons. A detailed step by step assembly manual for connecting the myriad of components is included and the car engine can be configured as a V8 or flat engine. The cylinders also move up and down as the car moves forward. The finished vehicle is 4 wheel drive and the body will twist as it navigates its way over small pebbles and bumps. Watch a demonstration video on our website

You may require the use of a side cutter and flat/phillips head screwdrivers.

Assembly time: 3 hours

Ramp not included Recommended for ages 8+

71	Cat.	Qty 1+	Qty 3+	Qty 6+
	KJ-8960	\$24.95	\$22.35	\$19.70

Motion Activated Lolly Dispenser

A smart alternative to messy, germ-filled lolly bowls and greedy portions. dispensing. The easy-fill top makes it simple to load in your unwrapped lollies, unsalted nuts and gum balls. Just wave your hand under the dispenser and the perfect amount pours out. Fun for families and perfect for the office.

- Built-in Sensor
- Large canister storage
- Integrated catch tray
- Integrated catch tray
 Designed for use with hard or semi-hard candy up to 35mm in size.
- Requires 4 x AA batteries or a 6VDC 500mA power adapter (use MP-3145)

 • Suitable for ages 12+

 • Dimension: 279(H) x 190.5(W) x 165(D)mm

Lollies not included

Qty 3+

\$35.90

Qty 6+

Novelty Air/Water Balloon Pump

Inflate balloons with air without becoming breathless doing it yourself, or fill balloons with water for some summer fun. There's also a water mister setting to keep cool in the summer heat. Includes 500 colourful balloons to get the fun started.

Suitable for ages 6+Dimensions: 330mm high



Qty 3+ GT-3013 \$14.95 \$13.35

Aquapod Bottle Rocket Launcher

The Aquapod is the most exciting and safest bottle rocket launcher ever. All you need is a common bike pump and any 2 litre plastic soft-drink bottle with a bit of water in it. Not only does the Aquapod launch a bottle up to 100 feet in the air, but no other launcher out there has a built-in safety valve that releases pressure at 60psi in order to keep everyone safe from over-pressurizing the launcher.

The Aquapod is built to last with high quality durable plastic.

- Suitable for ages 14+
 Dimensions: 270(L) x 205(W) x 75(H)mm



Cat. Qty 3+ Qty 6+ GT-3014 \$31.45

Handheld Bubble Blower with LED Lights

Not your ordinary bubble blower! This handheld device has vertical jaws that open and will produce continuos stream of super sized bubbles at the press of the trigger. Simply screw on the included bottle of bubble liquid and your ready to keep the kids entertained for hours chasing bubbles in the house or around the backyard. Features LED lights to add a fascinating effect.

- 2 x 100ml Bubble liquid included
- Requires 3 x AA batteries
- Suitable for ages 5+
 Dimensions: 170 (W) x 25(H) x 50(D)mm

Qty 4+ Qty 10+ \$13.35 AB-1232 \$11.70

USB Plasma Ball

Create a dazzling lighting effects with this USB Powered Plasma Ball that will surely impress your colleagues!

Plasma is the fourth state of matter - as the ball becomes energised, the gases inside light up and turn into plasma. By touching the outside of the ball, you provide a path for the energy to escape, so you can produce amazing effects.

System requirements:

- Windows XP or Mac OS X
- USB 1.1 port
- Dimensions: 130(H) x 100(W)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	GE-4089	\$19.95	\$17.70	\$15.70

LED Sabre with Sound Effects

Challenge your friends in an intergalactic battle and bring balance to the force. A unique LED sabre that changes colour with a swooshing sound effect with every strike. Also produces an eerie hum whilst you anticipate your enemies attack or you contemplate your next telling

Extremely light and durable, made of tough acrylic to take all the knocks of travelling around the galaxy at light speed

- Suitable for ages 8+
 Dimensions: 710(L) x 48(Dia)mm



This product is so good that if it was available 20 vears ago it could have been used in the Star

Realistic Sounds

Note: Laptop not included

Wars® movies, You will have to see one to realise just how realistic these are.



\$17.70 \$19.95

Ortest

Interactive Music Quiz

Test your family and friends' music knowledge with 'Quiz It' - the interactive music quiz that you control! Played individually or as a team, the object of the game is to be the first to buzz in with the correct answer to the music related question and the player or team who accumulates the most points wins.

Scores are awarded and deducted by the appointed Quizmaster, who is given the task of controlling the music player and the quiz master controller. Game options include 'Name That Track', 'Beat the Intro', 'Name the Artist' and 'Sing The Next Line'. If the game gets too easy, the Quizmaster can select from three distortion buttons to increase the level of difficulty.

Speaker console with music speaker, four team buzzers and LCD points display Quizmaster controller with music start/stop

button, points buttons, crowd sound effects three music distortion buttons and volume control

MP3 player (not included) connection to the Quizmaster controller

Requires 3 x AA batteries Suitable for ages 8 yrs+

Dimensions: 270(L) x 205(W) x 75(H)mm

GE-4233 \$19.95



Can't find what to buy? Give a Jaycar Gift card and let them choose!



GIFTS - PRACTICAL JOKER

Sudoku Toilet Paper

Need mental stimulation? Forget about reading National Geographic - just play with the sudoku loo roll! After you've finished, put it to good use!

Double ply



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	GH-1508	\$5.95	\$5.25	\$4.75

Coughing Lung Ashtray

Designed to look like a pair of lungs! This coughing and screaming ashtray depicts how harmful smoking is for your body. The ashtray bursts out in a disturbingly realistic coughing and screaming fit as soon as a cigarette is placed over it. A great gift for someone trying to give up or for the unrepentant smoker.



• Approx Dimensions: 130(W) x 115(L) x 45(H)mm



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	GH-1330	\$9.95	\$8.75	\$7.75

Pole Dancer LCD Alarm Clock

When the alarm goes, your personal pole-dancer goes into her routine, complete with light show and oh so funky music. A bit of wholesome entertainment for the man who has everything

- Requires 3 x AAA batteries
 Backlit LCD
- · Snooze function
- Dimensions: 120(W) x 200(H) x 100(D)mm



71	Cat.	Qty 1+	Qty 3+	Qty 6+
	GE-4079	\$19.95	\$17.70	\$15.70

HEALTH & FITNESS

Automatic Blood Pressure Monitor

Monitor your blood pressure at home. Using the oscillometric method it is designed to take accurate blood pressure readings from your wrist and calculate the average as well as store up to 3 readings. Press the start button and the microprocessor automatically calculates systolic and diastolic pressure as well as heart rate. Cost effective - less than one visit to a doctor. It's easy to use with a full instruction manual. Requires 2 x AAA batteries.

- 60 group memoryPulse & LCD displayArrhythmia detection function (IHB)
- Calculate average measurements
 Stores readings for up to 3 individuals
 Automatic inflate and deflate
- · Automatic power off function
- Pressure range: 0mmHg299mmHg
 Pulse range: 40-199 times per min

Note: This is not a medical diagnostic device and is intended to provide indicative readings only. It should be used in conjunction with advice from a doctor or other clinical professional.



7	Cat.	Qty 1+	Qty 4+	Qty 10+
	OM-7254	\$49.95	\$44.90	\$39.90

Shiatsu Neck Massager with Vibration & Heat

Soothe tired neck muscles with a deep and relaxing massage in the comfort of your home or office. Relieve stress and tension with 3 massage modes - Shiatsu, vibration or Shiatsu & vibration. This easy to use massager also features an additional heat mode perfect for unwinding after a long hard day.

- · 3 massage modes
- Heat mode
- · Mains powered
- Dimensions: 340(L) x 300(Dia)mm



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	GH-1764	\$69.95	\$62.95	\$55.95

KEYRINGS

Keyring Keyfinder with LED Torch

Have you ever misplaced your keys and needed them in a hurry? This brilliant device will generate a beeping sound when it detects a whistle. It features a high performance IC with built-in auto power off function to preserve the batteries. It will work effectively within a 3 metre radius. It also doubles as a handy keyring torch!

- Batteries included.
- Uses 2 x LR44 batteries
- Dimensions: 52(L) x 40(W) x 15(W)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	XC-0351	\$4.95	\$4.45	\$3.90

Wireless "Object Locator"

Locate misplaced objects such as keys, TV remote, glasses, children, wallet etc. No need to whistle, you simply press the master transmitter (colour coded) and the lost item beeps back. Range 7-10 metres which is usually adequate. Connect receivers by double sided. tape or lanyard to frequently misplaced items.

- Supplied: 1 x keyfob transmitter, 3 x separate receivers
- Dimensions: Transmitter 60(L) x 32(W) x 7(D)mm (receivers slightly smaller)



-	C-4	04 4 .	042	04.61
7	Cat.	Qty I+	Qty 3+	Qty 6+
	XC-0354	\$29.95	\$26.90	\$23.70

35mm Electronic Photo Frame Flashlight Keyring

Holding 100 photos, downloadable from a MAC or PC, it is CUTE! Comes with a stand that has double sided foam tape will look good on even the smallest desk

USB-micro USB lead supplied along with rechargeable battery (recharged by USB)

Dimensions 68(L) x 42(W) x 13(D)mm



7	Cat.	Qty 1+
	XC-0211	\$19.95

OUTDOOR GADGET

Digital Map Measure With LED Light

Working out the distance between two points on a map or chart is easy with this navigation tool. The scale can be adjusted for any map and the device can calculate the time required to travel the distance at a given speed. The LCD screen has a backlight for night use and an LED flash light. A must have gadget when out on the road, water, or in the bush



- 10m measuring range
- · Minimal distance on display: 1mm
- Backlight LCD
- ON/OFF, light, unit, scale and trace buttons
 1 x CR2032 3V battery Included

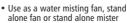
• Dimensions: 96(L) x 50(H) x 1	3(W)mm			146
7	Cat.	Qty 1+	Qty 3+	Qty 6+
	XC-0374	\$9.95	\$8.75	\$7.75

GH-1071

FANS

Water Misting Fan

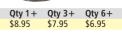
Be cool and comfortable while outdoors with this personal water mister and fan in one. It is handy and portable with a moulded hand grip and trigger pump for ease of use. Powerful enough to provide a significant amount of breeze but safe enough for the kids to use with soft blades. Great for use while camping, at the beach, or at sporting events etc.



- Large capacity for holding ice for extra cool mist 300ml capacity

Requires 2 x AA batteries







Portable Ceiling Fan and Light

Designed for use while camping, this battery powered ceiling fan is also great for use around the home or workshop. With a carabineer for easy setup you simply hang it anywhere you require some airflow and turn it on. The fan has soft foam blades for safety and two speed settings to match your cooling requirements. The bright white LEDs allow you to illuminate your tent or work area, while a softer yellow LED mode allows it to be used as a night light.



• Maximum Run Time: 48 hours

Requires 4 x D batteries (not included)
 Dimensions: 220(Dia) x 145(H)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	YS-2804	\$34.95	\$31.45	\$27.90

Portable Camping Shower - Battery Operated

This high quality portable shower is battery powered so you can use it almost anywhere. Simply drop the submersible pump into a clean water supply or attach it to a compatible water barrel, hang the shower head in a convenient location, and activate the pump with the push button switch. It can also be used as a direct water pump by detaching the shower head. Made from impact

resistant ABS plastic with rubber seals all components are weather resistant.

- Hose Length: 2.5m
 Power Cable Length: 1.8m
 Requires 4 x D batteries
- (not included)
 Battery Pack Dimensions:
 100(Dia) x 95(H)mm



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	YS-2802	\$49.95	\$44.90	\$39.90

BATHROOM GADGETS

Waterproof Bathroom Clock with Suction

A truly convenient and waterproof analogue clock. The suction cup allows you to mount it on to any smooth surface like a tiled wall or mirror. Ideal for renters or the family bathroom.

- Available in blue and pink.
- Requires 1 x AA battery (use SB-2425)
 Dimensions: 130(Dia)mm





71	Cat.	Qty 1+	Qty 3+	Qty 6+
Blue	AR-1757	\$9.95	\$8.75	\$7.75
Pink	AR-1758	\$9.95	\$8.75	\$7.75

Water Resistant FM **Shower Radio**

This elegant unit features spring-loaded hanging hook, push button tuning and volume. It also has a dial light which stays on for a few seconds to assist in station identification etc.. Also has timer alarm and is splash proof

- Requires 3 x AA batteries (use SB-2425)
 Dimensions: 145(L) x 80(W) x 45(D)mm



Freecall order hotline: 1800 022 888



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	GH-1873	\$29.95	\$26.90	\$23.70

Men's 3-In-1 Wet/Dry Groomer

Trim your beard, moustache, sideburns, nose, ear or other facial hair. Cordless and waterproof, the nozzle can be rinsed after use. Three attachments are included - a long hair trimmer, beard/moustache and nose/ear hair trimmers. Runs on a single AA battery

- 3 interchangeable heads
- Waterproof and hygienic125mm long

WORKS EXCEPTIONALLY WELL!!



Dual Sided Magnifying Mirror

Never have trouble putting in those contacts or applying your make-up again. This dual sided mirror has one mirror at 1 x magnification and the other at 5 x magnification. The frame is rimmed with a LED light making it ideal to use at night or in poor light conditions.

- Mirror dimensions: 110(Dia.)mm
- Mirror and frame dimensions: 150(Dia.)mm Requires 3 x AA batteries (use SB-2425)
- Dimensions: 180(L) x 110(W) x 200(H)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	GH-1067	\$24.95	\$22.35	\$19.70

Automatic Liquid Soap Dispenser

With a built in infrared sensor, this automatic liquid soap dispenser is a functional yet stylish addition to any kitchen or bathroom sink. It features a blinking LED to indicate operation, a large 410ml (14 ounce) liquid soap reservoir for fewer refills and a manual dispensing button to provide continuous soap flow for larger cleaning tasks. No mess, no fuss and best of all, this touch-free technology minimises the spread of germs.

- Requires 4 x AA batteries (use SB-2425)
- Dimensions: 90(W) x 130(D) x 200(H)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	GH-1187	\$14.95	\$13.35	\$11.70

Deluxe Automatic Soap Dispenser

Very Stylish! When you put your hands under it the unit automatically dispenses a suitable amount of liquid soap. This not only saves you from touching the soap bottle (hygiene issues) it provides no more soap than needed, extending the life of your soap supply. (This can be adjusted.)

- LCD features:
 Amount of soap left
- Dispense amount adjustment
- Battery condition
- Magnetic, removable drip tray
- Auto cleaning mode Uses 3 x AA batteries (not included)
- Dimensions: 195(H) x 85(W) x 160(D) mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	GH-1188	\$29.95	\$26.90	\$23.70

UV Sanitiser Toothbrush Holder

An ultraviolet light box to sterilise your toothbrushes and stop the build up of potentially harmful bacteria. It helps remove odours and can hold up to 4 toothbrushes at one time. Features an integrated drip tray and toothpaste holder.

- Mains power supply included
 Dimensions: 23.5(H) x 11.5(L) x 9(W)mm







Qty 3+ Cat. Otv 6+ GH-1191 \$49.95 \$44.90 \$39.90

CLOCKS

Solar Powered

Solar LCD Calendar Alarm Clock

Stylish slim-line design, this functional time piece is equipped with the modern essentials. Featuring a crisp LCD to display time, calendar and temperature, it has a dual alarm with snooze button and a solar cell for auxiliary power.

- 12/24 hour time and °C/°F temperature
- Requires 2 x AAA batteries
- Dimensions: 80(L) x 41(W) x 152(H)mm





Cat

XC-0213



Mini Talking Alarm Clock

What makes this LCD alarm clock unique is its ability to announce the time using a clear synthesised voice. It is silver in colour and features a protective front panel which unfolds into a desk stand - making it an ideal travellers clock. The alarm can be set to cuckoo, cock crow or beep-beep chimes which increase in repetition as the 60 second alarm duration expires. The clock can be set to announce the time on every hour or when the top mounted button is pressed.





7	Cat.	Qty 1+	Qty 3+	Qty 6+
	XC-0238	\$12.95	\$11.35	\$10.35

Solar LCD Clock with Calendar & Temperature

Ideal for home or office workspaces, this easy-to-read LCD clock has several additional handy features. Its large 55mm numerical time format & alarm function is complemented by a calendar date & temperature display in either Celsius or Fahrenheit. It's powered by 2 x AA batteries with auxiliary solar cells to prolong battery life. Suitable for wall mounting.

• Dimensions: 250(H) x 250(L)mm





7	Cat.	Qty 1+	
	AR-1761	\$19.95	

LCD Alarm Clocks with Temperature & Calendar

With clearly visible size and stylish designs these LCD alarm clocks are ideal for your home or office workspaces. With several handy features they relay the time, date and temperature. Displays hour, minute, second, month, date and day.

- Thermometer measuring in Celsius or Fahrenheit
 Humidity measurement by percentage (XC-0223 only)
 Alarm function control turn on/off
- Alarm and snooze function
- Built in stand

Two models to choose from

Specifications	Large XC-0221	Extra Large XC-0223
LCD Screen	192mm	330mm
Digits Height	60mm	100mm
Batteries Required	2 x AA	3 x C
Dimensions	280(L) x 180(H) x 20(W)mm	450(L) x 260(H) x 20.5(W)mm

7		Cat.	Qty 1+	Qty 3+	Qty 6+
	Large 192mm	XC-0221	\$39.95	\$35.90	\$31.90
	Extra Large 330mm	XC-0223	\$99.00	\$88.95	\$78.95

This up/down counter is ideal for cooking, exercising, sports, and keeping a check on the parking meter as it automatically announces the time under or over the countdown to zero. Also featuring a clock, 6 selectable alarms and auto-repeat function. Counts up or down for a maximum 24 hours.

- · Batteries included
- Dimensions: 83(H) x 65(W) x 27(D)mm

Up/Down Talking Timer



71	Cat.	Qty 1+	Qty 3+	Qty 6+
	XC-0128	\$24.95	\$22.35	\$19.70

Extra Large "Easy Read" LED Alarm Clock

This LED alarm clock is incredibly simple to use - you won't even need to read the instructions to set it! The extra large red number display is excellent for tired eyes, making reading the time easy at night or from a distance. This would be a great alarm clock for an older person or the quest bedroom.

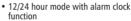
- Display dimensions: 140mm x 50mm Dimensions: 80mm height, 190mm width
- 80mm depth (base) Power: 240V mains power or 1 x 9V battery (use SB-2423)



7	Cat.	Qty 1+	Qty 3+	Qty 6+
	AR-1791	\$29.95	\$26.90	\$23.70

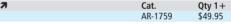
Blue LED Wall Clock with Alarm & Remote

Eye-catching LED wall clock with brilliant bright blue numeric display. With easyto-read numerals 2.5-inches tall, its fresh design will suit contemporary homes as well as modern offices, workshops, waiting rooms etc. Powered by mains adaptor with a 9V battery for memory back-up.



- Remote control included







XC-0221



XC-0223



DID YOU KNOW...

Percy Spencer (1894 - 1970)

During a radar-related research project around 1946 that Dr. Percy Spencer, a self-taught engineer, noticed something very unusual. He was testing a new vacuum tube called a magnetron, when he discovered that the candy bar in his pocket had melted. This intrigued Dr.

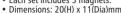
Spencer, so he tried another experiment. This time he placed some popcorn kernels near the tube and, perhaps standing a little farther away, he watched with an inventive sparkle in his eye as the popcorn sputtered, cracked and popped all over his lab and the microwave oven was imagined.

KITCHEN GADGETS

Rare Earth Fridge Magnets - Pack of 5

The nifty fridge magnets utilise rare earth magnets that are strong enough to hold up to 10 sheets of paper each on your fridge! Great for the home or office, their small size won't cover up your photos, notes or shopping lists.









Pack of 5









Kitchen Voice Recorder

We call this a kitchen voice recorder because of the strong magnet that will keep it safe and secure on your fridge but isn't restricted to kitchen use

Features a 2MB built-in memory, 25 minute max recording time, 3 folders being able to hold up to 50 messages, and a digital clock with seconds displayed if you need to time something. Use it for your shopping list, as a reminder of the chores the kids need to do whilst you're not there or even to record the ingredients mentioned on one of those quick cooking commercials where you can

Electronic volume control Mono built-in microphone

never find a pen to write them down.

- 28mm(dia.) built in speaker
- LCD screen
- Battery indicator
- Requires 2 x AA batteries (Use SB-2424)
- Dimensions: 130(L) x 66(H) x 17.2(W)mm



3kg Kitchen Scales

These scales are easy to use and will come in handy around the kitchen. Measuring up to 3kg, they have a resolution of 1g and a tare function so that you can disregard the weight of the mixing bowl and only weigh the ingredients. Will weigh in both metric and imperial

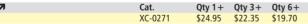
- Requires 2 x AA batteries
- Measures up to 3kg
- Resolution: 1g
 Auto power off
- Dimensions: 145(W) x 210(L)mm



Countdown Timer

Use it for cooking, parking, exercising, studying or even timing the kids on the computer. It's water resistant, easy to use, has a memory setting for frequently used values and the buzzer alerts you to when your time is up.

- Countdown range 99 hours 99 minutes 99 seconds
- Dimensions: 88(W) x 130(H) x 22(D)mm



Digital Luggage Scale

If you're going travelling, especially anywhere in Europe, an accurate luggage scale should be considered an essential. It costs less than a third of a kilo of Ryanair excess baggage charges and the scale itself weighs only 90g. It also takes two common AAA batteries you can get anywhere in the world.

- · Tare and auto-off
- Overload and low battery indication
- Dimensions: 122(L) x 85(H) x 25(W)mm



QM-7232 \$19.95 \$17.70 \$15.70

23 Piece Pink Mini Tool Kit

Who says tools are only for blokes? Introducing our elegant 23 Piece Pink Tool Kit for the handy female! This tool kit is compact and easy to store, it comes in a trendy carry case and is perfect for doing repairs at home, around the office and for travellers. These are good quality tools with rubberised grips to protect the most delicate hands!

Tool kit includes:

- Pink Torch
- Pink Side Cutters
- Pink Long Nose Pliers
 Pink Tape Measure
- Pink Driver Bit Handle with Magnetic Tip
- Extension Bar
- 2 Jewellers Screwdrivers
- Tweezers Screwdriver Bits Set

- 210(L) x 140(W) x 50(D)mm

7	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2067	\$14.95	\$13.35	\$11.70

SIGNS & DISPLAYS

your shop is open for trading or not.

LED Remote Controlled Open/Closed Sign



It also has a clock display that shows hours, minutes and seconds and you can disable the open/closed display if required. The display is remote controlled and runs from a 9V mains

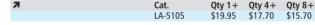
• Dimensions: 362(W) x 242(H) x 25(D)mm



Solar Powered Flashing Sign Display

A multitude of uses for this handy little display unit. You A multidude of uses for this flandy fittle display unit. You simply print out whatever you want to say on the sign, then slip it into the display. The solar cell keeps it flashing ad infinitum. Shop signs, desk photos, warning signs. Wall or table mount in landscape or portrait orientation. 1000s of uses and works in normal indoor light levels

Dimensions: 132(W) x 100(H) x 10(D)mm



Automotive LED Scrolling Message Signs

Attach this to the rear window of your car to display messages to other motorists. It could be used by taxi and bus drivers to communicate vacancy or destination, emergency traffic control vehicles could communicate messages to slow down. You can switch between pre-programmed messages easily with the supplied remote control and adjust the scrolling speed with ease Two models are available. VIDEO

SUCTION MOUNT AUTOMOTIVE LED SCROLLING SIGN • Powered from 12VDC cigarette

- lighter socket
- 350 red LEDs (7 x 50)
- Program up to 9 messages at 250 characters each
- Dimensions: 300(L) x 50(W) x 10(D)mm Cat. XC-0201



LED SCROLLING SIGN

This model comes with a cigarette lighter socket to mains adaptor so as well as automotive applications, it can also be used for shopfronts, schools, universities, car parks etc. Features rotateable stands.

- Powered from a 12VDC cigarette lighter socket or mains (with the supplied adaptor)
 280 red LEDs (7 x 40)
- Program up to 10 messages
- at 80 characters each Dimensions: 430(L) x
- 90(H) x 65(D)mm Cat. XC-0202



7		Cat.	Qty 1+	Qty 3+	Qty 6+
	Suction Mount Scrolling Sign	XC-0201	\$49.95	\$44.90	\$39.90
	Stand Mount Scrolling Sign	XC-0202	\$59.95	\$53.95	\$47.90







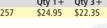














- Batteries included

- Capacity: 40kgBacklit LCD

Order Form

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Gift Card

Card

Num

Mastercard

Visa

Amex

(02) 8832 3118

Free Call 1800 022 888

Phone

Email techstore@jaycar.com.au

Wohsito



Rydalmere NSW 2110 Australia	6	International / Enc			TECHET	
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Address:			Email:			
Address:						
			Have you purchased by I		re? Ye	s No
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Qty	Cat No.	Descrip	tion	Unit	Total	Offic∈
				Price	Price	Use Only
-				Subtotal		Aerosol, flammables, heavy and bulky ite can only be sent by road.
Freight Invoice	Standard /	Premium Freight	One whole dollar per \$100 goods value or part there of (Australia only) See Terms & Conditions for details.	Insurance		Out of stock lines: Items under \$10 are no back ordered. Please re-order once item(are in stock. If your order is unusually but heavy or fragile, we may choose to send
Value	Road Freight	Orders made before 12:00pm delivered	working days	Freight		your goods to you by road at our expense We cannot send goods by road to a PO E However, if you feel your order may fit int this category, please include a street add
\$10-\$99.99	2-5 working days	Premium freight requires a street addi No delivery to P.O. boxes \$9.00		Subtotal		either work or home. Freight information. Simply add the amou shown in the freight charges chart on the
\$100-\$199.99	\$9.00	\$11.00		Less Credits		Don't forget to add extra amount for airms and insurance if you require these service These charges are for goods sent by pos
\$200-\$499.99	\$12.00	\$16.00		_		in Australia only - not airmail overseas or road freight.
Over \$500	\$17.00	POA		Total		Final check. Please make sure that you have given full details of the products you require the correct respect the full post to
Over 20kg	POA	POA		Minimum or	der \$10	require, the correct prices, the full postage transportation cost, plus make sure that y name and address are legible.
Overseas Airmail	POA	NA				Your order will arrive faster if all details given are correct.
Payment	Details					Minimum order amount \$10. 14 Day satisfaction guarantee. Provided that you have returned the good in original condition (and that means the
Cheque/Mon	ey Order in A\$ (do no	ot post cash) Credit Accor	unt (approved customers	only)		outer packaging, if any, must be unmarke You must keep your invoice as proof of purchase. We will not refund post, packin

Signature

Exp:

Terms & Conditions

PRICES

All prices quoted in this catalogue include Goods and Services Taxes (GST) and are current at the time of printing. So you can be confident of price stability. At Jaycar Electronics, we make every endeavour to maintain prices for the life of the catalogue. However, factors beyond our control (such as changes in foreign currency exchange rates, changes in base material costs etc.) may vary costs and we reserve the right to amend prices accordingly.

STOCK AVAILABILITY

At Jaycar Electronics we are constantly seeking new products and due to the rapid developments within the electronics industry some products in this catalogue may become obsolete or discontinued during its life. In the event of this happening we apologise for the inconvenience and where possible will substitute a similar product of equal or better quality.

OUR RAINCHECK

If your local Jaycar Electronics store has sold out of a currently advertised line, we will be happy to issue you with a 'raincheck'. This 'raincheck' can be presented as soon as the stock arrives and you can buy the original item (or its comparable product) at the advertised price - even if the original promotion has ended. 'Rainchecks' do not apply to items that have been advertised as 'limited', 'discontinued', 'surplus' or 'dearance' ranges.

' CHANGE OF MIND' RETURNS

Although not obligated to do so, at Jaycar Electronics we appreciate that you may have second thoughts about your purchases and will give a 'Change of Mind' refund if goods' are returned within 7 days (14 days for mail order and internet customers). For 'Change of Mind' purchases, goods can only be accepted back for refund or exchange in "as sold" condition induding undamaged original packaging, complete instruction] books, manuals, accessories, etc. If freight expenses of any type have been incurred, these are not refundable. We regret that any cash, credit card, or EFTPOS refunds over \$250 must be refunded by cheque for security reasons. Jaycar does not provide credit notes. Your Sales Docket must accompany all returns.

**Note:Refunds on 'Change of Mind' purchases do not apply to books, batteries, headphones, health products, semiconductors, computer software, all recordable media, some tools and nonmultimeter test equipment (induding cathode ray oscilloscopes), step-down transformers (240-100V), some party lighting and associated products.

WARRANTIFS

Jaycar warranty period is 3 months from date of purchase, or such longer period as stated in this catalogue. Many products carry one year, two year, five year, or lifetime warranty or may qualify for over-the-counter replacement. These items are identified in the catalogue by the icons explained on page 5. If any defect in materials or workmanship in product sold by Jaycar Electronics is identified and notified to us within the warranty period then we will, at our discretion repair or replace the product. Jaycar Electronics does not accept any liability beyond this for consequential loss. Warranty is subject to us being satisfied that a defect was caused by defective workmanship or materials and was not caused by or was not substantially contributed to by other factors beyond our control, including (but not limited to) defective installation, maintenance, or repair; alterations or modifications of the product in a manner not recommended by the manufacturer; or any neglect, misuse or excessive use. The original Sales Docket or cash receipt must accompany warranty claims to provide starting date of the warranty period.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

KIT WARRANTY

Most kits are successfully constructed with few problems; however, once the kit is under construction all warranty is void, as we cannot guarantee assembler's workmanship or components that have been used.

FREIGHT CHARGES RELATING TO WARRANTY ITEMS
Warranty repairs or replacements of goods is free of charge
however freight charges to and from the service department is
required to be paid by the customer.

TRADE CARD

If you are professionally engaged in some aspect of the electronics industry on a daily basis, you may qualify for a Jaycar Electronics Trade Card. This facility is available in every store including TECHSTORE, to provide you with the opportunity to purchase at special trade prices. Simply call into your local Jaycar store and ask the manager or if you are a TECHSTORE customer email us at techstore@jaycar.com.au. We can provide you with convenient locations, fantastic service and great prices! (Not available for transactions outside Australia and New Zealand.)

ACCOUNT FACILITIES

Jaycar Electronics is happy to provide account facilities for the following organisations:

- Schools (Government & non-Government), TAFE, Colleges and
 Universities
- State & Federal Government Depts. including research facilities
- · Hospitals
- Mining companies
- · TV & Radio Stations
- · ALL public ('LTD') companies
- ALL 'Pty Ltd' companies, Sole Traders or Partnerships must complete an account application form. Simply write to "The Financial Controller", P.O. Box 107 Rydalmere 2116. If you are one of the above you can buy from us on a 30-day (strictly from invoice) account. The invoice will go with the goods or to your accounts payable office (you nominate).

 Non Payment of monies due will be cause to discontinue supply and to commence recovery procedures.

RECOVERY OF MONIES OWED

In the event that Jaycar needs to recover monies owed then the full balance on the account becomes due and payable and all costs of recovering this money will be born by the debtor.

TECHSTORE - MAIL ORDER & INTERNET PURCHASES

For Mail Order & Internet Purchases special conditions apply:

- Goods Aerosols, flammable, heavy and bulky items cannot be sent by post.
- Payment via cheque, money order or credit card (MasterCard, Visa, American Express)
- · Minimum Order Value Mail order & Internet purchases have a minimum order value of \$10.
- · International Orders Please remember you may have to pay customs and importing charges at your end (if applicable). We cannot supply full customs documentation, but all parcels include required customs dockets. Should you require to return goods for any reason from outside Australia it is essential that customs documentation is included. If customs dockets are not included it can be a costly exercise to have the goods cleared by Customs and the customer must pay this charge. Failure to include customs documentation may result in long delays. Note: Jaycar Electronics cannot accept any responsibility or liability for the suitability of any product for use outside Australia, nor its compliance with local regulations.
- Freight Various freight options and rates are given on the order form. After selecting the freight option that suits you, please dearly mark it and add these additional changes to the total on your order. Goods cannot be delivered to a post office box via road or air courier service.
- Missing or Damaged Goods At Jaycar, we've sent out hundreds of thousands of parcels via post over the last 20+ years and the number of items that have been genuinely lost is less than 0.001%. We've found road and air transportation equally as reliable. However it must be emphasised that our responsibility for the goods ceases when the goods are handed over to the nominated carrier. Risk on the goods passes to you when the goods leave our warehouse. Our order form allows you to elect to have goods insured against loss in transit at your cost otherwise loss of goods in transit is at your own risk. All daims for missing and damaged goods in transit must be lodged with the carrier or local Post Office. If goods have been insured please contact Jaycar Electronics.
- Insurance If you wish to insure, insurance will cost you 1% of the value of the goods and we are happy to arrange it on your behalf. This insurance covers goods DAMAGED in transit. If you order by phone you will be asked if you wish us to insure on your behalf. Insurance will cost S1 for every \$100 value or part thereof eg. If your order is for \$145 the insurance will be \$2. (Note: Some items such as solar panels etc. are difficult to ship and have a higher insurance fee of \$7.50 per \$500.) If you do not wish to insure a statement saying 'Insurance Declined' will appear on the order. If you post an order don't forget to consider insurance. We do not automatically issue insurance

unless you specify. If you don't mention insurance you will NOT be insured

Out of Stock Items - items under \$10 are not back ordered.
Please re-order once item(s) are in stock.

STORE LOCATIONS AND HOURS

Store locations and hours are located on the back of this catalogue and were correct at time of print. For new stores and current trading hours visit our website at www.jaycar.com.au.

JAYCAR AUTHORISED STOCKISTS

A listing of Jaycar Stockists in your area can be found on the inside back cover of this catalogue. For new Stockists visit our website at www.jaycar.com.au. If you are a reseller of electronics goods you may be able to increase your income by reselling Jaycar products. For more information contact The Dealer Manager on 1300 738 555 or email dealers:@iaycar.com.au.

ANY PRORIEMS

We are proud of our standing with our Customers and are keen get any feedback, good or bad, to improve our service, products, stores - in fact any aspect of our business. So please, do not hesitate to contact us.

PRIVACY POLICY

Jaycar endeavours to protect your privacy by:

- Only collecting information from those we deal with which is necessary for our business to adequately service our customers.
- Except where the law says otherwise, the external organisations having access to this information are approved mailing houses that mails our marketing material to our customers or credit card/credit reference companies for finance approval.
- · We do not use any personal information we have collected for any other purposes without seeking the individual's permission.
- We will take reasonable steps to ensure personal information is accurate and complete at all times.
- Individuals are able to remain anonymous when entering a transaction, by paying cash; they do not have to disclose personal information.
- We will hold the information indefinitely so future marketing material can be sent to the individual. If you do not wish to receive this material in the future, please email the privacyofficer@jaycar.com.au to have your details removed.
- Personal information will not be disclosed to any organisation individual who has not given a commitment to deal with such information in a way, which is consistent with the National Privacy Principles and will be disclosed only in accordance with those Principles.
- All information is securely held by the organisation to prevent tampering, interference by outside sources or unauthorised use by employees or agents of the organisation.
- Individuals can access the information that our organisation holds on them in accordance with the National Privacy Principles.
- If an individual believes the information we hold on them is not accurate they have the right to apply to the organisation to have that information corrected.
- A Privacy Officer has been appointed to assist all individuals with requests for access to information or concerns about the handling of their information. That person may be contacted via email privacyofficer@jaycar.com.au or you may forward such requests in writing to Jaycar Electronics, P.O. Box 107 Rydalmere 2116.

WHOLESALE ENQUIRIES

For wholesale enquiries, please refer to our main supplier Electus Distribution (Australia: 1300 738 555 & New Zealand: 0800 235 328).

LEGAL JURISDICTION

Jaycar operates under the laws and regulations of the State of New South Wales. Therefore any legal disputes will be conducted in courts or tribunals situated in New South Wales and under the laws and regulations of New South Wales.

DISCLAIMER

All possible care has been taken in the preparation of this catalogue. However, specification and particulars in relation to the products referred to in this catalogue are subject to change without prior notice. Some photographs contain samples which are representative only. Stocked item may vary in colour and look. Jaycar Electronics will not be held liable for any errors or

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Byron Street Auto Electrics Ph: 02 6722 1015 Fax: 02 6722 1014

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Katoomba Electronics Ph: 02 4734 8747 ke_jaycar@yahoo.com.au

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Narooma Picture Framing & Photographic Ph: 02 4476 1755 narpic@exemail.com.au

Narrabri Retravision Ph: 02 6799 1310 Fax: 02 6792 3385

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Singleton Hi-Fi Ph: 02 6572 2477 terry@singletonhifi.com.au

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ULLADULLA

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Caleb@thinktechnology.com.au

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gdelectronics@gdcomms.com.au

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sales@aande.co.nz

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shop@adamants.co.nz Tech Central Ph: 07 378 6278

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Boonen Electronics Ph: 07 579 4861 boonen.tga@xtra.co.nz

sales@electronicsplus.co.nz

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ADELAIDE

221-223 Morphett St, 5000 Ph: (08) 8231 7355 *Fri: 8.30-7.30

CLOVELLY PARK 1168A South Rd, 5042 Ph: (08) 8276 6901 *Thurs: 8.30-7.30

GEPPS CROSS 3B/580 Main Nth Rd, 5094 Ph: (08) 8262 3200

Thurs: 8.30-7.30 REYNELLA

141 Sherriffs Rd, 5161 Ph: (08) 8387 3847 *Thurs: 8.30-6.30 *Closed Sunday

HOBART 245 Main Rd

Derwent Park, 7009 Ph: (03) 6272 9955 *Fri: 8.30-6.30

LAUNCESTON 167 Brisbane St, 7250 Ph: (03) 6334 2777 *Fri: 8.30-6.30

VIC CHELTENHAM 315 Warrigal Rd, 3192 Ph: (03) 9585 5011

*Fri: 8.30-7.30

COBURG 266 Sydney Rd. 3058 Ph: (03) 9384 1811 *Fri: 8.30-7.30

FERNTREE GULLY 815 Burwood Hwy, 3156 Ph: (03) 9758 0141 *Fri: 8.30-7.30

FRANKSTON 80 Dandenong Rd West, 3199 Ph: (03) 9781 4100 *Fri: 8.30-7.30

GEEL ONG 180 Moorabool St. 3220

(Cnr Little Ryrie St) Ph: (03) 5221 5800 *Fri: 8.30-7.00

HALLAM

1/261 Princes Hwy, 3803 Ph: (03) 9796 4577 *Fri: 8.30-7.30 KEW FAST

Ph: (03) 9859 6188

MELBOURNE CITY 45 A'Beckett St. 3000 Ph: (03) 9663 2030

RINGWOOD

SHEPPARTON

Shop 4, 575-585 Wyndham St, 3630 Ph: (03) 5822 4037

*Closed Sunday

& Dandenong Rds. Mulgrave, 3170 Ph: (03) 9547 1022 *Mon-Thurs: 8 30-6 00 *Fri: 8.30-7.30

SUNSHINE 204 McIntyre Rd, 3020 Ph: (03) 9310 8066

*Fri: 8.30-7.30 THOMASTOWN 225B Settlement Rd, 3074 Ph: (03) 9465 3333

*Fri: 8.30-7.30 WERRIBEE Cnr Synnot & Wedge St, 3030 Ph: (03) 9741 8951

*Fri: 8.30-7.30

JOONDALUP Unit 1/4 Packard St 6027 Ph: (08) 9301 0916 *Thurs 8.30-7.30 *Closed Sunday

latest information.

*Sun: 11.00-4.00

NEW ZEALAND TRADING HOURS

Monday to Friday 8.30am to 5.30pm Saturday 9.00am to 5.30pm Sunday 10.00am to 4.00pm

CHRISTCHURCH 85 Gasson St,

Sydenham, 8023 Ph: (03) 379 1662 *Fri: 8.30-6.30

782 High St, 3102

*Fri 8.30-7.30

*Fri: 8.30-6.30

94 Maroondah Hwy, 3134 Ph: (03) 9870 9053 *Fri: 8.30-7.30

SPRINGVALE Cnr Springvale

MANUKAU

(Auckland

DUNEDIN

Kensington, 9016 Ph: (03) 471 7934

135 Wairau Rd, Wairau Valley, 0627 Ph: (09) 444 4628

HAMILTON 92 Commerce St, Frankton, 3204 Ph: (07) 846 0177

*Closed Sunday MANDURAH

1/78 Pinjarra Rd, 6210 Ph: (08) 9586 3827 *Thurs: 8.30-7.30 *Closed Sunday

MIDI AND 1/203 Gt Eastern

Hwy, 6056 Ph: (08) 9250 8200 *Thurs: 8 30-7 30

326 Newcastle St. Northbridge, 6003

PERTH

Ph: (08) 9328 8252 *Thurs: 8.30-7.30 *Sun: 12.00-5.00 ROCKINGHAM

1/61 Dixon Rd, 6168

Ph: (08) 9592 8000 *Thurs: 8.30-7.30 *Closed Sunday

NEW STORES

We've got plans for new store locations throughout 2012. Check website for

*For late night trading hours and exceptions check your local store listing.

1 Lees St, (Cnr Princes St)

*No late night trading GI ENEIEI D (Cnr Tristram Ave)

*Fri: 8.30-6.30

*Thurs: 8.30-6.30 HASTINGS 819 Heretaunga St West, Saint Leonards, 4120 Ph: (06) 876 0239

42a Lambie Dr Manukau, 2104

Ph: (09) 263 6241 *Thurs: 8.30-6.30 MOUNT WELLINGTON (Auckland) 16-18 Fisher Cres, 1060

Ph: (09) 258 5207 *No Sunday or late night trading NEWMARKET

231 Khyber Pass Rd, (Cnr Boston Rd) 1023 Ph: (09) 377 6421 *Thurs: 8.30-6.30

NEW LYNN 2171 Great North Rd 0600 Ph: (09) 828 8096

*Thurs: 8.30-6.30 PALMERSTON

NORTH 2-4 Ada St. Hokowhitu 4410 Ph: (06) 353 8246 *Thurs: 8.30-6.30

264-272 Taranaki St, Mount Cook 6011 Ph: (04) 801 9005 *Thurs: 8.30-6.30

WELLINGTON





Locate your nearest Jaycar Store To download the application please visit: www.jaycar.com.au/stores

STOCKIST



AUSTRALIA www.jaycar.com.au